

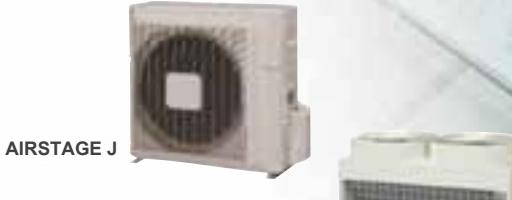
# VRF



AIRSTAGE creates a comfortable space with a wide range of series variations.

## Contents

- 076 AIRSTAGE J Heat pump type
- 084 AIRSTAGE S Heat recovery type
- 088 AIRSTAGE V Heat pump type
- 102 AIRSTAGE V-II Heat pump type
- 120 Control Systems



2008 New Model  
AIRSTAGE V-II series

THE POSSIBILITIES ARE INFINITE

FUJITSU



AIRSTAGE™



Variable Refrigerant Flow system For Home & Buildings

FUJITSU GENERAL LIMITED

Compact VRF System for use in apartments, homes, shops, offices and a broad range of other applications

**Heat pump**  
AJYA54LCLR



## Economy & Comfort

### Powerful operation with low electricity consumption

Excellent EER/COP are attainable as shown in the table below.

Cooling EER	Heating COP
3.20*	3.40*

\* "EER/COP" is the coefficient of performance (=capacity (kW) ÷ input power (kW)).  
\*EER/COP values are base on our own testing method.

Uses a high-performance DC inverter scroll compressor with variable capacity according to the load during cooling and heating.



### Low noise design

Newly designed larger fan and double casing bell mouth construction reduce noise emissions.

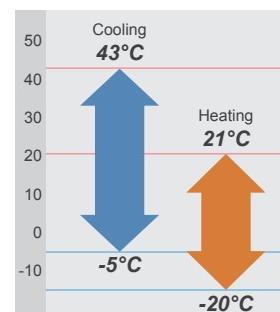
**Large fan**  
Low speed design suppresses noise by using a larger fan.



**Double casing bell mouth**  
Double casing bell mouth helps to reduce noise.

### Wide operating range

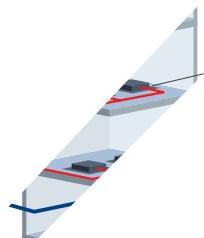
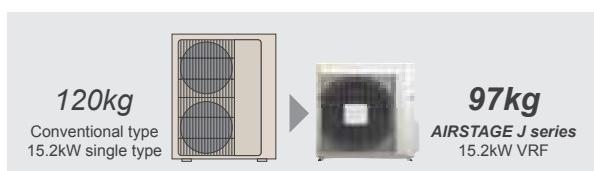
Outdoor unit operates over an ambient temperature range of -5°C to 43°C for cooling and -20°C to 21°C for heating.



# Design Versatility

## Compact design

Small, compact casing can be easily concealed. The low overall height allows the unit to be neatly positioned beneath a window.



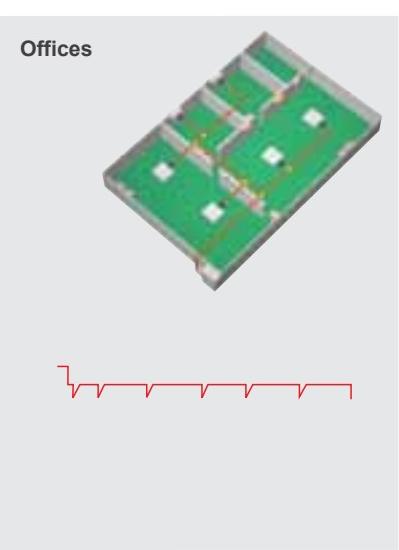
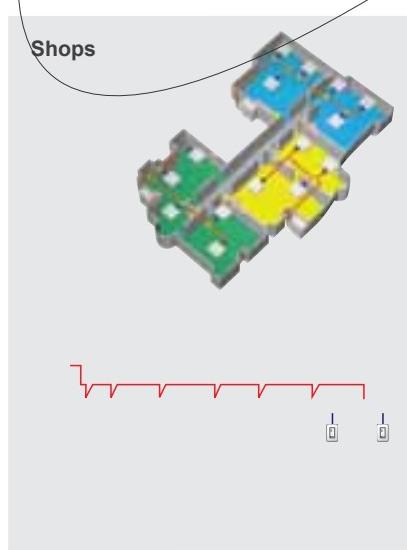
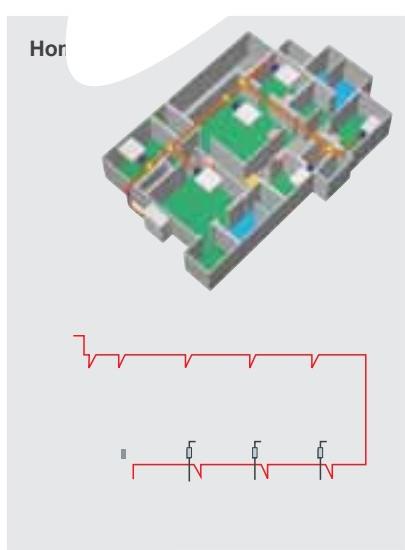
## High capacity connection

- Up to 8 indoor units can be connected to 1 outdoor unit. Furthermore, the indoor connection capacity can be up to 150% of the outdoor unit rating. This increases flexibility.
- All indoor units are supplied with a Wireless Remote Controller.



System

Dual air conditioning of multiple rooms

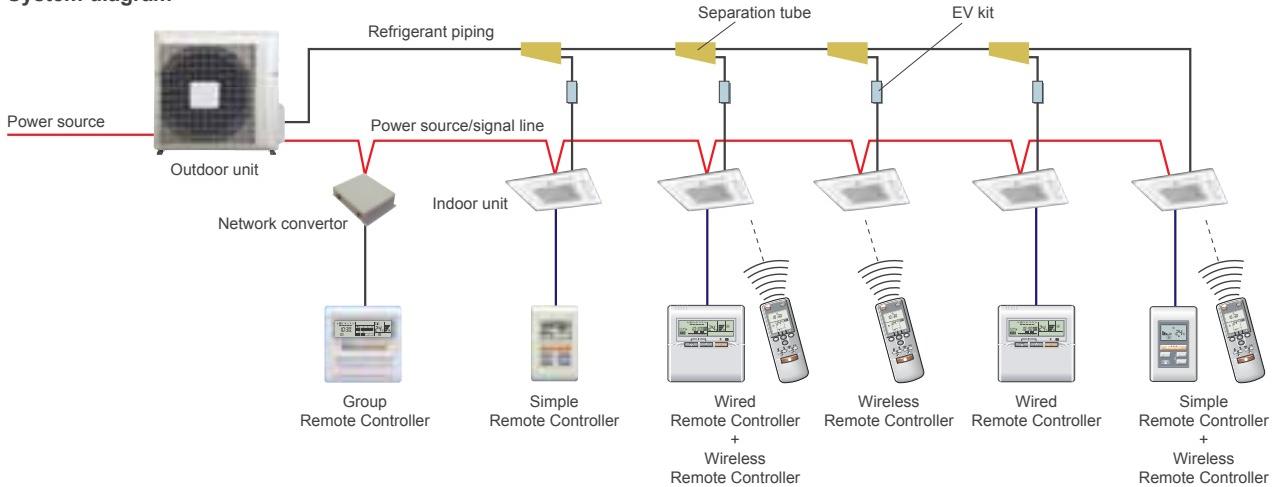


# Easy Installation

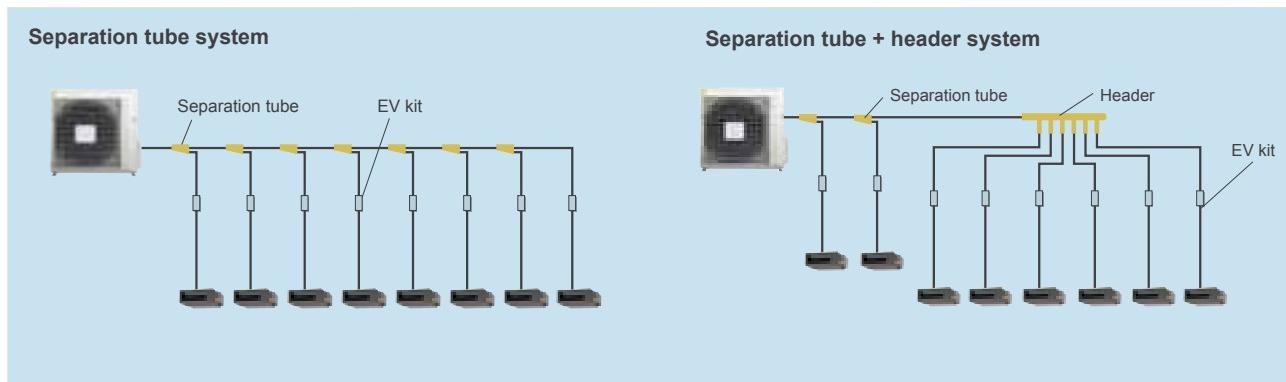
## Simple piping system

The wiring work is simple in the connection wiring system one by one. The dedicated communication line is unnecessary. The electrical work is simple because of single-phase power supply.

### System diagram

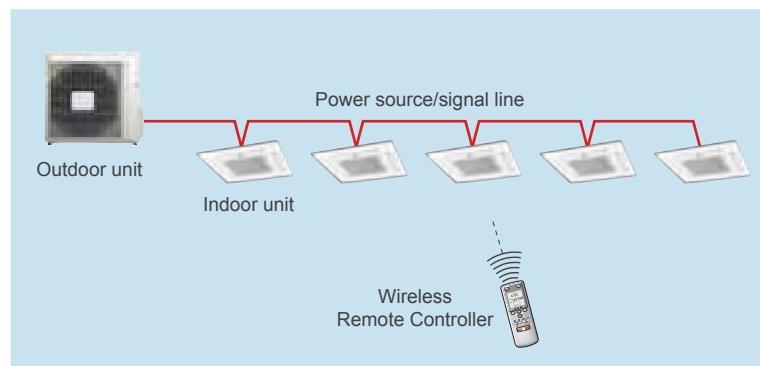


## Piping connection examples



## Easy system address setting

During installation work, system addressing can be performed using the wireless remote controller, thus eliminating manual switch setting.

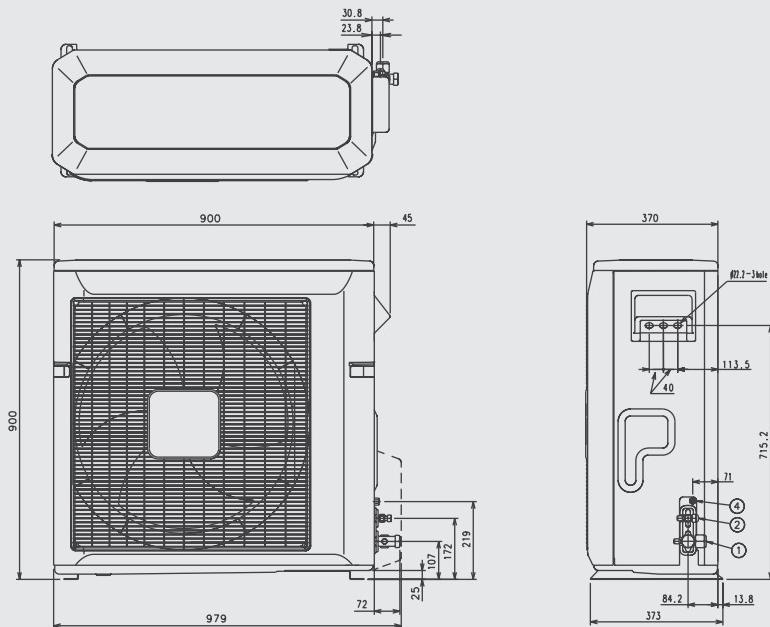


## Outdoor units specifications

### Dimensions

Model: AJYA54LCLR

(Unit : mm)



### Specifications

Rating Capacity range	HP	6
Model name	AJYA54LCLR	
Maximum Connectable Indoor Unit	8	
Indoor unit connectable capacity   Cooling   kW	7.6 to 22.8	
Power source	Single-phase, 220-240V, 50Hz	
Capacity   Cooling   kW	15.2	
Capacity   Heating   kW	16.6	
Input power   Cooling   kW	4.75	
Input power   Heating   kW	4.88	
EER   Cooling   W/W	3.2	
COP   Heating   W/W	3.4	
Air flow rate   High   m³/h	5,250	
Sound pressure level   Normal operation mode   dB (A)	56	
Sound pressure level   Silent operation mode   dB (A)	51	
Compressor motor output   kW	3.0	
Heat exchanger fin	Plate fin coil	
Dimensions   Height   mm	900	
Dimensions   Width   mm	900	
Dimensions   Depth   mm	370	
Weight   kg	97	
Refrigerant charge   kg	3.0	
Connection pipe diameter   Liquid   mm	ø9.52	
Connection pipe diameter   Gas   mm	ø19.05	
Operation range   Cooling   °C	-5 to 43	
Operation range   Heating   °C	-20 to 21	

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).

Heating: Indoor temperature 20°CDB/(15°CWB), and outdoor temperature 7°CDB/6°CWB.

Voltage: 230 [V]

## Indoor units lineup

Capacity range (kW)	2.15	2.80	3.60	4.00	5.30	5.70	
Model code	7	9	12	14	18	20	
<b>Compact Cassette</b>							
	AU7UFAAR	AU9UFAAR	AU12UFAAR	AU14UFAAR	AU18UFAAR		
<b>Slim Type Cassette</b>							
						AU20UFARR	
<b>Compact Duct</b>							
	ARXA07LALR	ARXA09LALR	ARXA12LALR	ARXA14LALR	ARXA18LBLR		
<b>Duct</b>							
<b>Compact Wall Mounted</b>							
	AS7UFADR	AS9UFADR	AS12UFADR	AS14UFADR			
<b>Wall Mounted</b>						AS18UFAJR	

6 Types, 28 Models, Capacity range from 2.15kW to 14.1kW

6.00	6.90	7.05	8.80	10.5	12.7	14.1
22	24	25	30	36	45	54
		 <b>AU25UFARR</b> <small>Slim Type</small>	 <b>AU30UFARR</b> <small>Slim Type</small>	 <b>AU36UFASR</b>	 <b>AU45UFASR</b>	 <b>AU54UFASR</b>
 <b>ARXA22LBLR</b>						
		 <b>AR25UFAAR</b> <b>ARXB25LATR</b>	 <b>AR30UFAAR</b> <b>ARXB30LATR</b>	 <b>AR36UFAAR</b>	 <b>AR45UFAAR</b>	
	 <b>AS24UFAJR</b>		 <b>AS30UFAJR</b>			

## Indoor units specifications

### Compact Cassette



Model name			AU7UFAAR	AU9UFAAR	AU12UFAAR	AU14UFAAR	AU18UFAAR		
Power source					220-240V, 50Hz				
Capacity	Cooling	kW	2.15	2.80	3.60	4.00	5.00		
	Heating		2.45	3.10	4.10	4.50	5.45		
Input power		W	28		52		50		
Airflow rate	High	m³/h	530		580		640		
	Med		480		520		540		
	Low		410		460		470		
Sound pressure level	High	dB(A)	38		41		44		
	Med		35		37		38		
	Low		31		34		35		
Dimensions (H x W x D)	Net	mm	230 x 570 x 570						
Weight	Net	kg	18						
Connection pipe diameter	Liquid (Flare)	mm	ø6.35						
	Gas (Flare)		ø9.52		ø12.70		ø15.88		
	Drain		ø32 (I.D.); ø37 (O.D.)						

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).

Heating: Indoor temperature 20°CDB/15°CWB, and outdoor temperature 7°CDB/(6°CWB).

Voltage: 230[V]

### Cassette



Model name			AU20UFARR	AU25UFARR	AU30UFARR	AU36UFASR	AU45UFASR	AU54UFASR
Power source					220-240V, 50Hz			
Capacity	Cooling	kW	5.70	7.05	8.80	10.5	12.7	14.1
	Heating		5.80	7.85	9.10	10.7	13.7	15.8
Input power		W	117		129		142	
Airflow rate	High	m³/h	1,030		1,170		1,270	
	Med		850		970		1,070	
	Low		680		770		880	
Sound pressure level	High	dB(A)	42		42		45	
	Med		38		40		42	
	Low		37		39		39	
Dimensions (H x W x D)	Net	mm	246 x 830 x 830			296 x 830 x 830		
Weight	Net	kg	34		34		40	
Connection pipe diameter	Liquid (Flare)	mm	ø6.35		ø9.52		ø15.88	
	Gas (Flare)		ø15.88		ø19.05		ø32 (I.D.); ø37 (O.D.)	

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).

Heating: Indoor temperature 20°CDB/15°CWB, and outdoor temperature 7°CDB/(6°CWB).

Voltage: 230[V]

## Duct



Model name	ARXA07 LALR	ARXA09 LALR	ARXA12 LALR	ARXA14 LALR	ARXA18 LBLR	ARXA22 LBLR	ARXB25 LATR	ARXB30 LATR	AR25 UFAAR	AR30 UFAAR	AR36 UFAAR	AR45 UFAAR	
Power source													
Capacity	Cooling kW	2.15 2.45	2.80 3.10	3.50 4.10	4.00 4.80	5.30 5.60	6.00 6.30	7.05 7.85	8.80 9.10	7.05 7.85	8.80 9.10	10.5 10.7	12.7 13.7
Input power	W	32	49	77	155	155	155	155	155	155	155	315	
Airflow rate	High m³/h	420 390	620 550	890 840	1,340 1,090	1,340 1,090	1,340 1,090	1,340 1,090	1,200 1,100	1,200 1,100	2,200 2,000	2,200 2,000	
Static pressure range	Pa	0 to 40	0 to 40	0 to 40	0 to 80	0 to 80	0 to 80	0 to 80	30 to 160	30 to 160	30 to 180	30 to 180	
Sound pressure level	High Med Low dB(A)	34 32 31	33 29 27	42 41 38	33 29 26	33 29 40	33 29 40	33 29 40	44 42 45	44 42 45	49 47 45	49 47 45	
Dimensions (H x W x D)	Net mm	217 x 663 x 595	217 x 953 x 595	217 x 953 x 595	270 x 1,210 x 700								
Weight	Net kg	18	25	25	43	43	43	43	43	43	43	45	
Connection pipe diameter	Liquid (Flare) Gas (Flare) mm Drain	ø9.52 ø12.70 ø21.5 (I.D.); ø26 (O.D.)	ø6.35 ø15.88	ø6.35 ø15.88	ø9.52 ø19.05								

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).

Heating: Indoor temperature 20°CDB/15°CWB, and outdoor temperature 7°CDB/(6°CWB).

Standard static pressure: 0Pa (AR7 to AR22), 100Pa (AR25 to AR45).

Voltage: 230[V]

## Wall Mounted



Model name	AS7UFADR	AS9UFADR	AS12UFADR	AS14UFADR	AS18UFAJR	AS24UFAJR	AS30UFAJR	
Power source								
Capacity	Cooling kW	2.15 2.45	2.80 3.10	3.50 4.10	3.80 4.50	5.40 5.60	6.90 7.80	8.00 8.80
Input power	W	26	33	40	38	50	50	60
Airflow rate	High m³/h	410 370	500 450	540 510	840 700	950 800	950 940	1,050
Sound pressure level	Med dB(A)	30 27	36 33	39 37	42 39	45 41	45 41	48
Dimensions (H x W x D)	Net mm	257 x 808 x 187			320 x 1,120 x 220			
Weight	Net kg	8			16			
Connection pipe diameter	Liquid (Flare) Gas (Flare) mm Drain	ø9.52 ø12.70 ø12 (I.D.); ø16.2 - 17 (O.D.)	ø6.35 ø15.88	ø6.35 ø15.88	ø9.52 ø19.05	ø9.52 ø19.05	ø9.52 ø19.05	

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).

Heating: Indoor temperature 20°CDB/15°CWB, and outdoor temperature 7°CDB/(6°CWB).

Voltage: 230[V]

Maximum comfort from  
inbuilt flexibility

Heat recovery  
AO90MPCMF



## High Efficiency

### Operating system

Cooling and heating can be performed simultaneously within the same refrigerant circuit. Energy savings are made by transferring heat between the indoor units when in heat recovery operation.

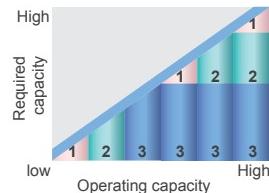
**Cooling EER**  
**2.98\***

**Heating COP**  
**3.15\***

\*EER/COP values are base on our own testing method.

### Smooth operation delivering high efficiencies

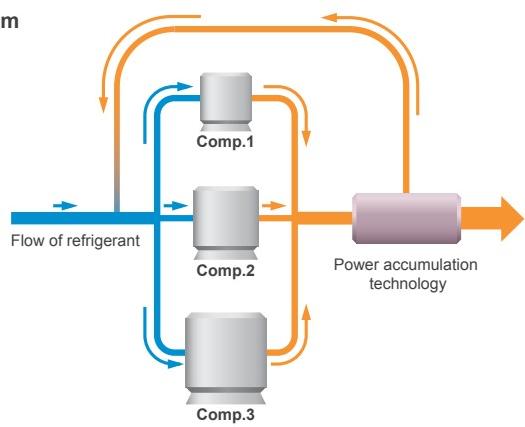
The configuration of 3 constant speed compressors with differing capacities and power accumulation technology ensure smooth step changes and highly efficient operation.



### Power accumulation technology

Flow rate to the indoor unit(s) is controlled through the use of 3 differently rated compressors operating in a sequential step arrangement. While power accumulation technology controls the circulating load of the refrigerant flow between those steps.

Diagram



## Comfortable Operation

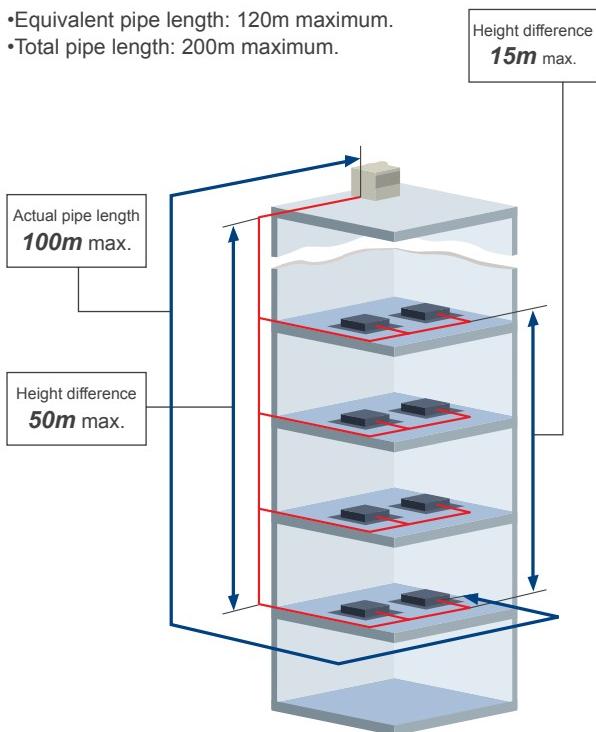
### Heat recovery operation

Heat recovery operation is a cooling/heating free operation system, cooling and heating can be performed simultaneously in the same refrigerant system according to user needs. At the moment, the Heat Recovery operation is an extremely superior type that provides a still greater energy saving effect by moving heat between indoor units that are performing the cooling and heating operations. This is by having the compressors act like a pump.

# Design Versatility

## Long piping system design

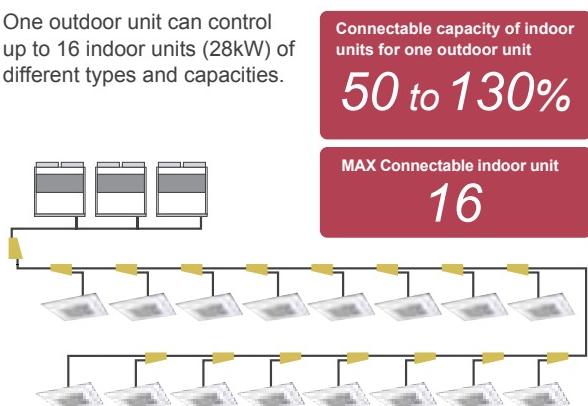
- Equivalent pipe length: 120m maximum.
- Total pipe length: 200m maximum.



\*When outdoor unit is located above indoor unit. When outdoor unit is located below the indoor unit the height difference is 40m maximum.

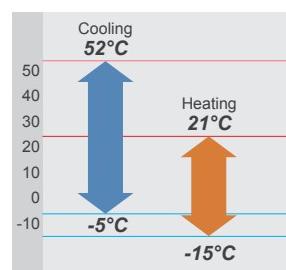
## High capacity connection

One outdoor unit can control up to 16 indoor units (28kW) of different types and capacities.



## Wide operating range

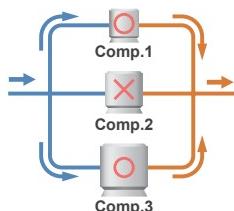
Outdoor unit operates over an outdoor temperature range of -5°C to 52°C for cooling and -15°C to 21°C for heating.



# High Reliability

## Recovery operation

**Outdoor Unit:** In the event of compressor failure an alarm is automatically triggered and the remaining compressor(s) will continue to operate, thereby ensuring continuous operation when possible.



**Indoor Unit:** Each indoor unit operates independently from the others and is, therefore, not affected by a failure within any part of the network.

## Oil recovery operation

After a fixed period of time the oil recovery operation automatically returns accumulated oil found in the refrigerant circuit and indoor units.

# Improved Comfort

## Quiet operation

Operational noise has been reduced yet further through the application of a new dual casing bell-mouth and large fan. When set to silent operation, noise levels can be reduced by 5-6dB(A) compared to normal operation.

Normal operation mode  
55dB(A)

Silent operation mode  
50dB(A)  
(380V)

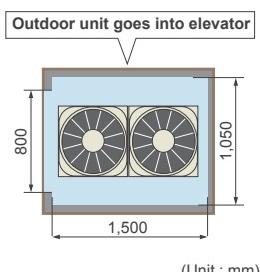
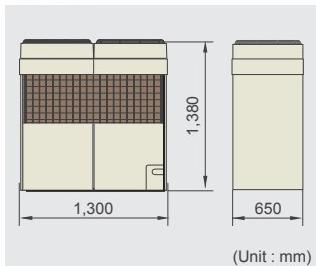
# Easy Installation

## Space saving

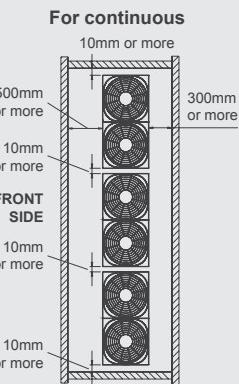
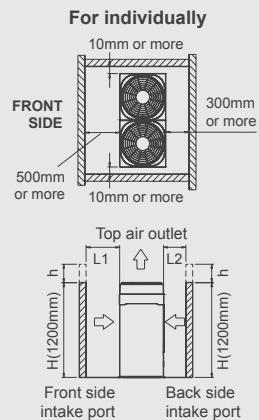
Space saving by setting side by side without space in between.

Setting size **5.72** (Unit: m<sup>2</sup>)

Dimensions



## Installation space

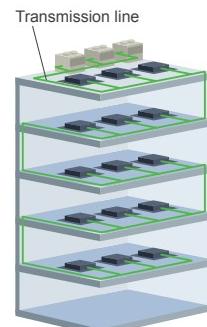


There is no height restriction for the side wall.  
The height(H) of front and rear wall should be less than 1,200mm.  
If the height of wall exceeds 1,200mm by h mm, add h mm to the service space width for L1 and L2.  
H≤1,200 : L1≥500, L2≥300      H>1,200 + h : L1>500 + h, L2>300 + h

## Easy wiring

### Transmission line:

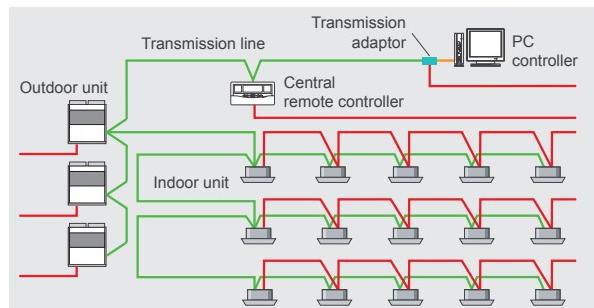
Non-polar 2-conductor transmission line prevents erroneous wiring.



### Power supply wiring:

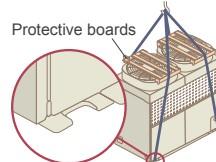
Power supply for outdoor and indoor units is different.

- **Outdoor unit**  
3Ø 4W 380 - 415V 50Hz
- **Indoor unit:**  
1Ø 2W 220 - 240V 50Hz



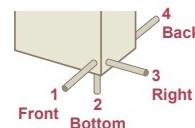
## Craning into place

The outdoor unit can be lifted by crane and set down on the building roof.



## Four-direction pipe

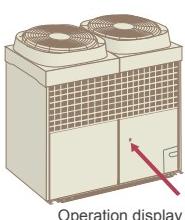
Four-direction piping allows a variety of installation configurations.  
Easy installation and pipe direction setting.



# Easy Maintenance

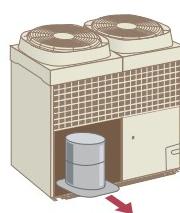
## Operating display

By indicating the operating status and details of failures on a PCB in the outdoor unit, better service and quick and easy maintenance are possible.



## Easy replacement

A pull-out plate ensures easy compressor replacement if necessary.



## Pump down control

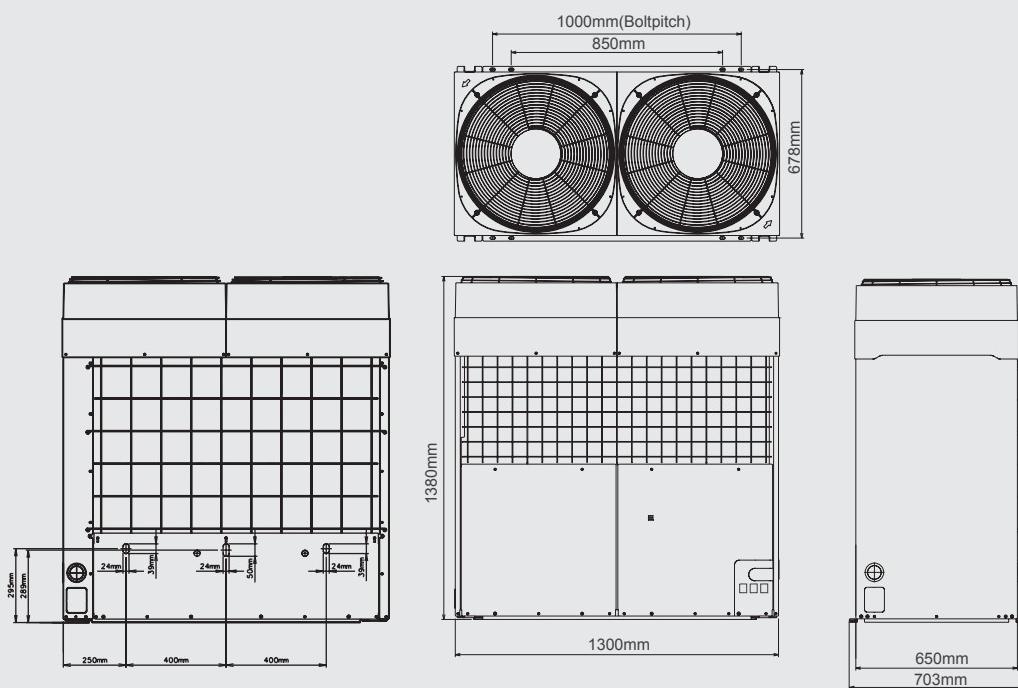
Pump down can be performed from the outdoor unit using the switch on the PCB.

## Outdoor units specifications

### Dimensions

Model: AO90MPCMF

(Unit : mm)



### Specifications

Rating Capacity range	HP	10
Model name	AO90MPCMF	
Maximum Connectable Indoor Unit	16	
Indoor unit connectable capacity   Cooling   kW	14 to 36.4	
Power source	3 phase, 380 - 415V, 50Hz	
Capacity   Cooling   kW	28.0	
Capacity   Heating   kW	31.5	
Input power   Cooling   kW	9.40	
Input power   Heating   kW	10.0	
EER   Cooling   W/W	2.98	
COP   Heating   W/W	3.15	
Air flow rate   High   m³/h	9,800	
Sound pressure level   Normal operation mode   dB (A)	57	
Sound pressure level   Silent operation mode   dB (A)	51	
Compressor motor output   kW	1.5 / 3.4 / 5.0	
Heat exchanger fin	Plate fin coil	
Dimensions   Height   mm	1,380	
Dimensions   Width   mm	1,300	
Dimensions   Depth   mm	650	
Weight   kg	313	
Refrigerant charge   kg	13	
Connection pipe diameter   Liquid   mm	ø12.70	
Connection pipe diameter   Gas   mm	Discharge Gas ø19.05 / Suction Gas ø28.58	
Operation range   Cooling   °C	-5 to 52	
Operation range   Heating   °C	-15 to 21	

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Building air conditioning developed  
to care for people and  
their surroundings

#### Master units

AJYA72LBTF<sub>(22.4kW)</sub>  
AJYA90LBTF<sub>(28.0kW)</sub>  
AJY126LBTF<sub>(40.0kW)</sub>

#### Slave units

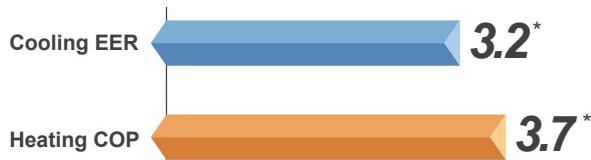
AJYA72UBTF<sub>(22.4kW)</sub>  
AJYA90UBTF<sub>(28.0kW)</sub>  
AJY126UBTF<sub>(40.0kW)</sub>



## High Efficiency

### Higher level of EER/COP

All key features of the outdoor unit result in a higher level of EER/COP



\* The data refers to a 10HP outdoor unit.

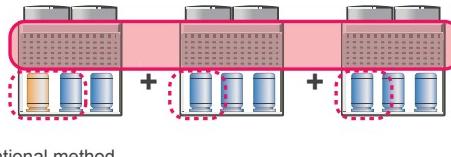
\* "EER/COP" is the coefficient of performance [= capacity (kW) ÷ input power (kW)].

\*EER/COP values are based on our own testing method.

### High efficiency operation

The heat exchanger is operated at maximum efficiency by effectively using the heat exchanger of each outdoor unit reciprocally.

**Example:** The larger heat exchanger than the capacity of a compressor is used in each outdoor unit. (V series)



Conventional method



### Energy saving technology



**Large propeller fan:** A newly designed fan is adopted for achieving higher performance and reducing the noise level.

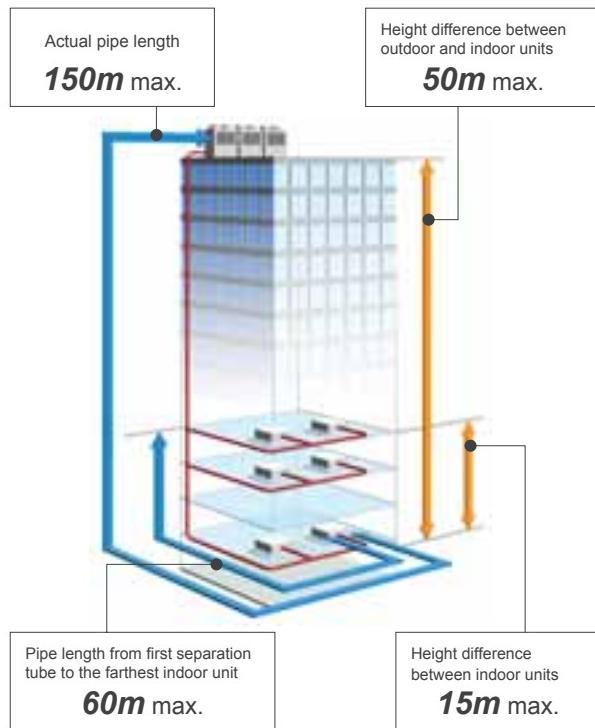
**Sine-wave DC Inverter Control:** By adopting Sine-Wave DC Inverter Control for smoothing the motor running, energy saving and high efficiency operation are realized

**DC inverter + Scroll compressor:** By combining the DC inverter controlled scroll compressor with the constant speed scroll compressor, an operating system of energy saving and high efficiency is realized.

# Design Versatility

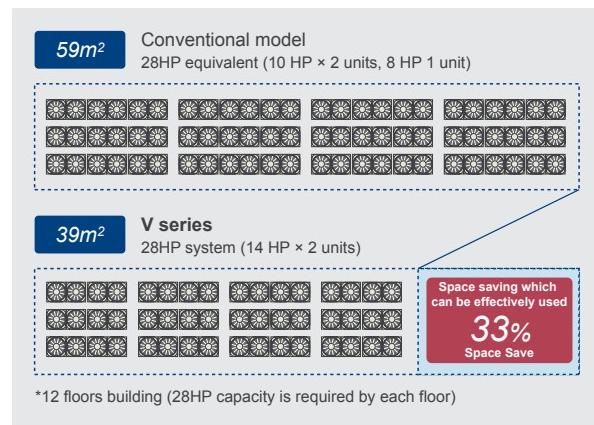
## Long piping system design

With the V Series, installation up to a maximum piping length of 150m and a maximum height difference of 50m is possible. In addition, the piping can be extended up to a maximum of 60m from the first separation tube.



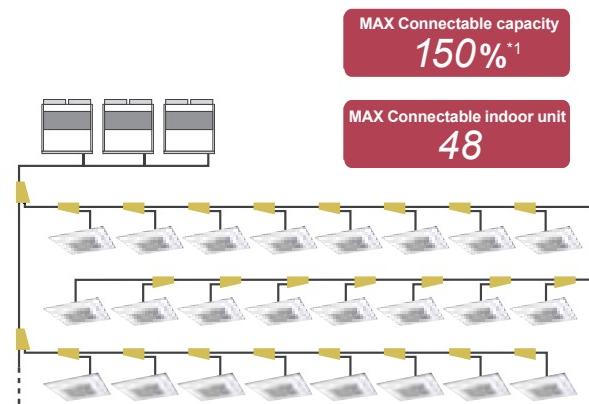
## Compact outdoor unit improves effective use of space

Installation space can be reduced freeing up valuable building space



## High capacity connection

The Indoor unit connection ratio of this system can be from 50 to 150%(\*1) of the outdoor unit capacity, thus achieving a high level of diversification with up to 48 indoor units (30 to 42HP) connectable on one refrigerant system.

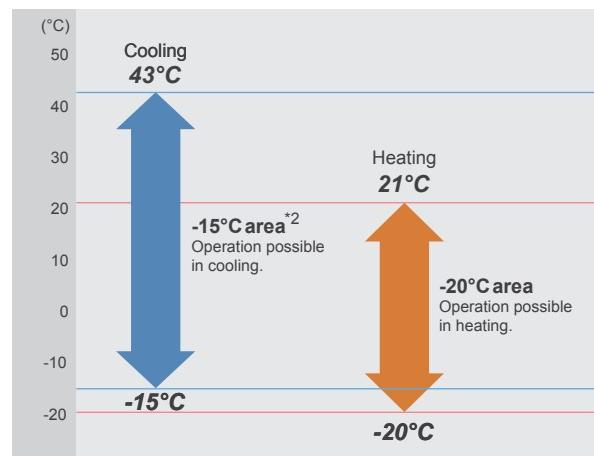


\*1. Indoor unit connectable capacity is 75 to 150% for single outdoor unit system (8 - 14HP) in case of including indoor unit model code 18 and under in the system.

Note: When all indoor units are operating at maximum capacity individual indoor units operate at a slightly lower capacity.(When connecting more than 100%)

## Wide operating ranges

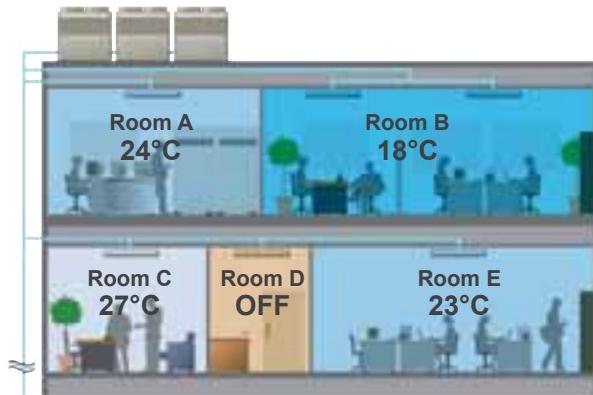
World's top class low outdoor air temperature operating range is achieved. This extends the potential locations for use to the cold regions of the world.



# Improved Comfort

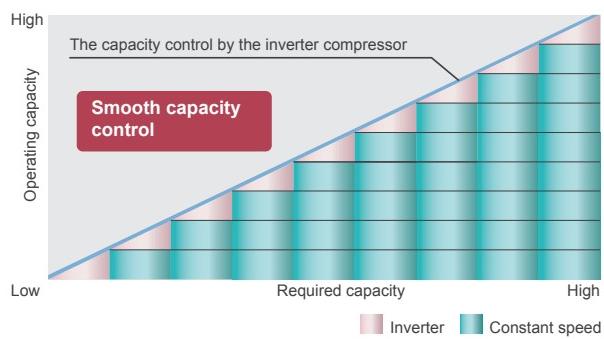
## Individual air conditioning system

Pleasant air conditioning meeting individual room requirements.



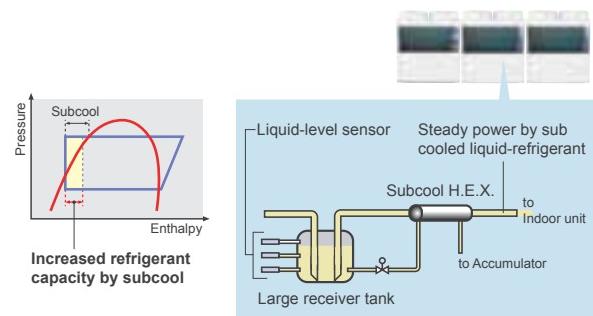
## Inverter control

Comfort and energy saving is achieved by the adoption of linear step control in conjunction with inverter and constant speed compressor combination, which allows more precise control of the necessary refrigerant circulation amount required according to the system load. This also allows for a comfortable environment by use of smooth capacity control.



## Liquid level balance control

Balancing of the refrigerant in the system is optimized by liquid level balance control and subcool circuit between the receiver tanks of each outdoor unit. Stable refrigerant supply allows long pipe runs and achieves stable operational system performance whilst reducing unpleasant refrigerant noise.



## Quiet operation

**Outdoor unit:** Quiet operating sound outdoor unit achieved. Operating noise has been reduced further through the application of a new dual casing bell mouth and large fan. The noise level can be reduced by 4-5dB (A) compared to normal operation by selecting silent operation.

**Indoor unit:** Quiet indoor units suited for bedrooms and other rooms which require quietness are available.

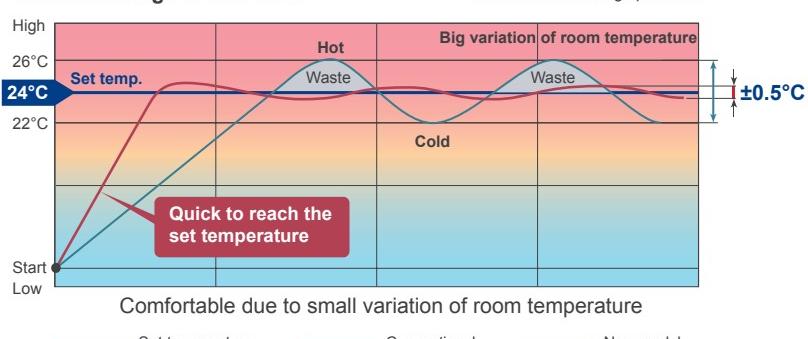


## Room temperature control

High precision  $\pm 0.5^\circ\text{C}$  ensures comfortable temperature control of the room. This is achieved by smooth refrigerant flow, controlled by inverter and by the indoor unit electronic expansion valve.

### Thermal change of the room

\*Simulation in heating operation.

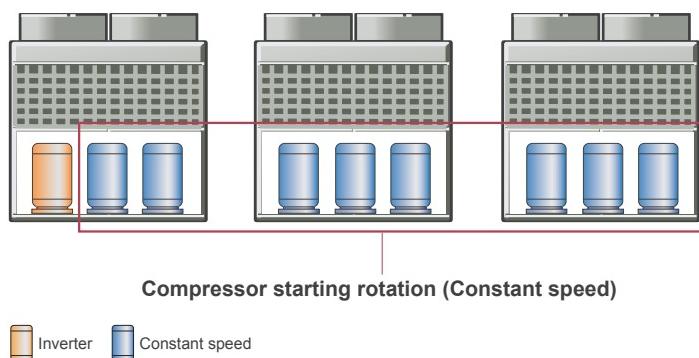


# High Reliability

## Compressor rotation control

### Improvement of long life by reducing compressor wear

In addition to control which reduces the number of times the compressor is started and stopped, the load at starting is shared and equalized by rotation control. This rotation improves the durability and reliability of each compressor.



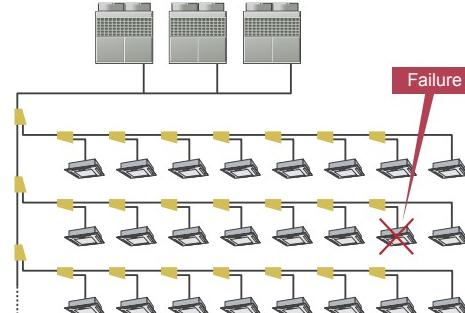
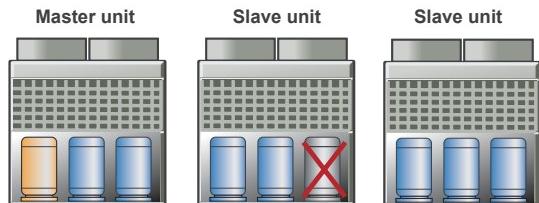
## Emergency operation

### Outdoor unit:

There is no immediate system shutdown if trouble occurs in any compressor. The other compressors continue to operate on an emergency basis.

### Indoor unit:

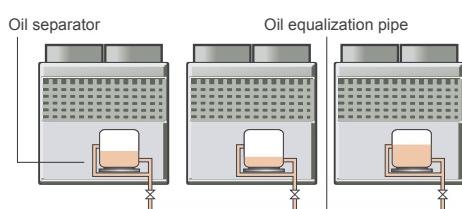
Each indoor unit is controlled individually on the system network. This allows all indoor units to continue to run unaffected even if trouble should occur at any indoor unit(s) in one system.



## Optimum oil control

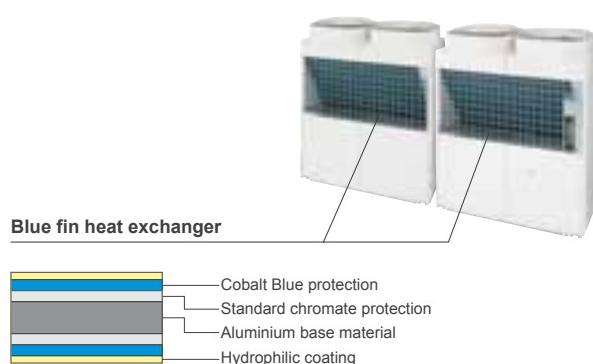
Stable operation of compressor by optimum oil control

- 1** High trapping efficiency, large capacity cyclone type oil separator
- 2** Oil balance control which maintains uniform oil levels
- 3** Optimum EEV control for oil and refrigerant circulation



## Adoption of blue fin heat exchanger

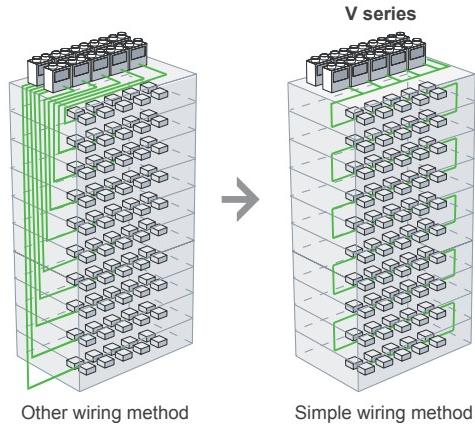
Corrosion-resistance of the heat exchanger even in coastal areas has been improved by blue fin treatment of the outdoor unit heat exchanger.



# Easy Installation

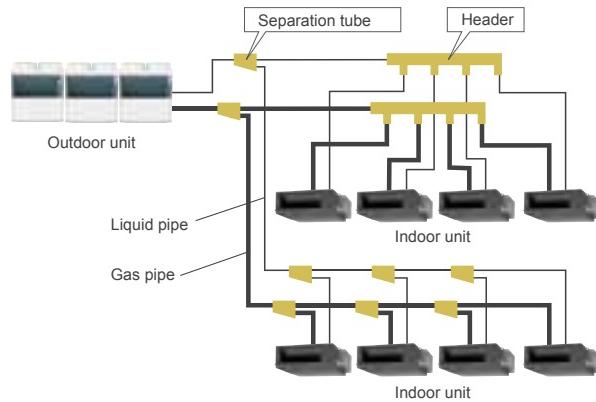
## Simple signal line connection

Connection method simplifies installation and prevents errors. By using our wiring connection method, the wiring length is reduced compared to other wiring systems.

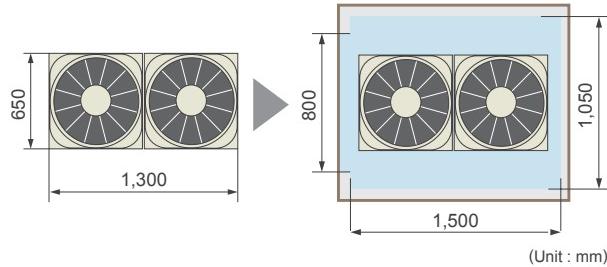


## Simple piping system

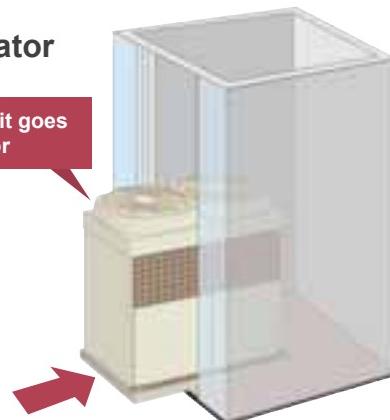
Separation tubes and headers provide connection flexibility and simplicity reducing installation costs.



## Compact outdoor unit can be carried in a small elevator

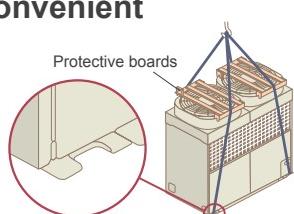


Outdoor unit goes into elevator



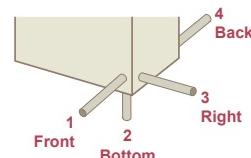
## Lifting belt hooks convenient in crane work

The outdoor unit can be lifted by crane and set down on the building roof.



## Choice of 4-direction piping connection

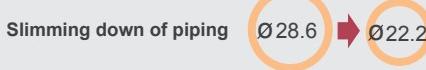
4-direction piping allows a variety of installation configurations. Easy installation and pipe direction setting.



### Pipe size reduction

Use of R410A refrigerant allows for a pipe size reduction compared to the conventional system. This offers improvement in construction work and a reduction in piping costs.

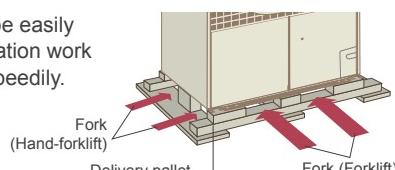
Slimming down of piping



In case of gas pipe for 10HP outdoor unit

## Easy removing pallet

Delivery pallet can be easily removed and installation work can be performed speedily.

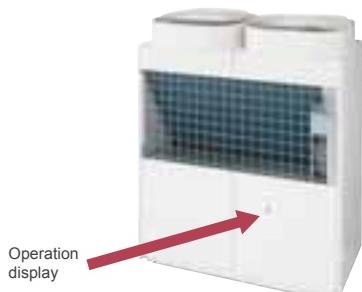


# Service & Maintenance

## Operating display

### Outdoor unit

By indicating the operating status and details of failures on a PCB in the outdoor unit, better service and quick and easy maintenance are possible.



### Indoor unit

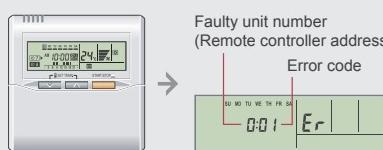
The operation status of the indoor unit can be easily checked by operation indicator. In addition, when an error occurs, the error contents are displayed and repair work can be performed quickly.



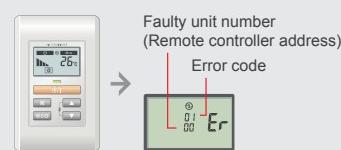
### Error display with self-diagnosis function

When an error or abnormality occurred in the system, the indoor unit No. and error code at which the error occurred are displayed at the display section of the controller. (Except wireless remote controller)

### Wired Remote Controller



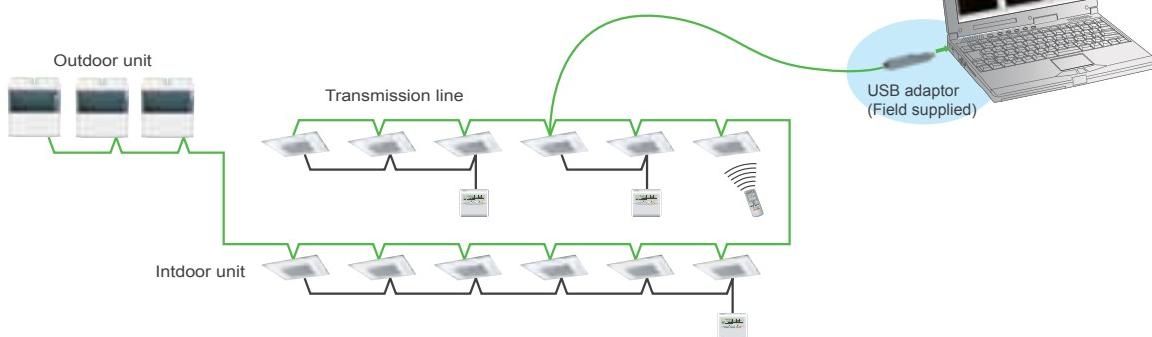
### Simple Remote Controller



## Improves maintenance and inspection mobility (Service Tool)

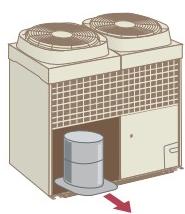
Extremely portable and convenient USB type adaptor was used.

Connection anywhere in the VRF network is easy. Data can be collected from device sensors at a minimum interval of 2 second, and maintenance and inspection work can be performed easily.



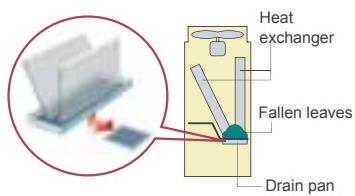
## Easy replacement

Compressor can be moved by pull-out tray which simplifies inspection and replacement work. A pull-out plate ensures easy compressor replacement if necessary.



## Drain pan cleaning is easy

Detachable drain pan simplifies removal of fallen leaves collected in the drain pan at the bottom of the heat exchanger.



## Outdoor units

### Lineup and Combination

#### Capacity Lineup

Unit	HP	Capacity	Model name
Master units 	<b>8</b>	22.4kW	AJYA72LBTF
	<b>10</b>	28.0kW	AJYA90LBTF
	<b>14</b>	40.0kW	AJY126LBTF
Slave units 	<b>8</b>	22.4kW	AJYA72UBTF
	<b>10</b>	28.0kW	AJYA90UBTF
	<b>14</b>	40.0kW	AJY126UBTF

#### Combination

Unit	HP	Capacity (kW)	Master	Slave 1	Slave 2
	<b>8</b>	22.4	AJYA72LBTF	—	—
	<b>10</b>	28.0	AJYA90LBTF	—	—
	<b>14</b>	40.0	AJY126LBTF	—	—
	<b>16</b>	44.8	AJYA72LBTF	AJYA72UBTF	—
	<b>18</b>	50.4	AJYA90LBTF	AJYA72UBTF	—
	<b>20</b>	56.0	AJYA90LBTF	AJYA90UBTF	—
	<b>22</b>	62.4	AJY126LBTF	AJYA72UBTF	—
	<b>24</b>	68.0	AJY126LBTF	AJYA90UBTF	—
	<b>26</b>	72.8	AJYA90LBTF	AJY126UBTF	—
	<b>28</b>	80.0	AJY126LBTF	AJYA72UBTF	AJY126UBTF
	<b>30</b>	84.0	AJYA90LBTF	AJYA90UBTF	AJYA90UBTF
	<b>32</b>	90.4	AJY126LBTF	AJYA90UBTF	AJY126UBTF
	<b>34</b>	96.0	AJY126LBTF	AJYA90UBTF	AJYA90UBTF
	<b>36</b>	102	AJY126LBTF	AJY126UBTF	AJY126UBTF
	<b>38</b>	108	AJY126LBTF	AJY126UBTF	AJYA90UBTF
	<b>42</b>	120	AJY126LBTF	AJY126UBTF	AJY126UBTF

### Specifications

Rating Capacity range	HP	8	10	14	16	18	20	22
Unit 1		AJYA72LBTF	AJYA90LBTF	AJY126LBTF	AJYA72LBTF AJYA72UBTF	AJYA90LBTF AJYA72UBTF	AJYA90LBTF AJYA90UBTF	AJY126LBTF AJYA72UBTF
Unit 2								
Unit 3								
Maximum Connectable Indoor Unit		15	16	16	30	32	32	32
Indoor unit connectable capacity	Cooling kW	11.2-33.6	14.0-42.0	20.0-60.0	22.4-67.2	25.2-75.6	28.0-84.0	31.2-93.6
Power source					3Phase 380-415V 50Hz			
Capacity	Cooling kW	22.4	28.0	40.0	44.8	50.4	56.0	62.4
	Heating	25.0	31.5	45.0	50.0	56.5	63.0	70.0
Input power	Cooling kW	7.00	8.75	13.3	14.0	15.8	17.5	20.3
	Heating	6.76	8.51	13.2	13.5	15.3	17.0	20.0
EER	Cooling W/W	3.20	3.20	3.00	3.20	3.20	3.20	3.07
COP	Heating	3.70	3.70	3.40	3.70	3.70	3.70	3.50
Air flow rate	High m³/h	10700	10700	10800	10700 x 2	10700 x 2	10700 x 2	10800+10700
Sound pressure level*2	Cooling dB (A)	58	58	60	61	61	61	62
	Heating	60	60	62	63	63	63	64
Compressor motor output	kW	3.0 + 4.6	3.0 + 4.6	3.0 + 4.6 + 4.6	3.0 + 4.6 / 3.7 + 3.7	3.0 + 4.6 / 3.7 + 3.7	3.0 + 4.6 / 4.6 + 4.6	3.0 + 4.6 + 4.6 / 3.7 + 3.7
Heat exchanger fin		Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height mm	1500	1500	1500	1500   1500	1500   1500	1500   1500	1500   1500
	Width mm	1300	1300	1300	1300   1300	1300   1300	1300   1300	1300   1300
	Depth mm	650	650	650	650   650	650   650	650   650	650   650
Weight	kg	269	269	374	269 + 272	269 + 272	269 + 272	374 + 272
Refrigerant charge	kg	14.0	14.0	15.5	14.0 + 14.0	14.0 + 14.0	14.0 + 14.0	15.5 + 14.0
Connection pipe diameter	Liquid mm	ø12.70	ø12.70	ø12.70	ø12.70	ø15.88	ø15.88	ø15.88
	Gas mm	ø22.22	ø22.22	ø28.58	ø28.58	ø28.58	ø28.58	ø34.92
Operation range	Cooling °C	-15 to 43	-15 to 43	-15 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43
	Heating	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

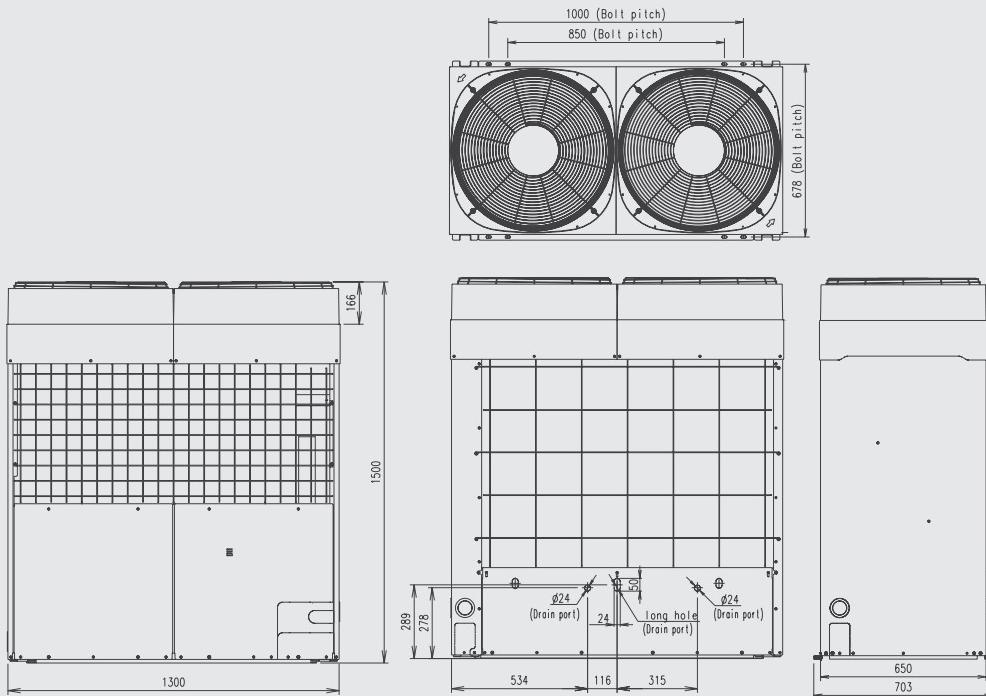
Heating : Indoor temperature of 20°CDB / 15°CWB, and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5m; Height difference between outdoor unit and indoor unit : 0m.

## Dimensions

Master unit and slave unit are same dimensions.

(Unit : mm)



24	26	28	30	32	34	36	38	42
AJY126LBT AJYA90UBTF	AJYA90LBT AJYA72UBTF AJYA72UBTF	AJY126LBT AJY126UBTF	AJYA90LBT AJYA90UBTF AJYA90UBTF	AJY126LBT AJYA90UBTF AJYA72UBTF	AJY126LBT AJYA90UBTF AJYA72UBTF	AJY126LBT AJY126UBTF AJYA90UBTF	AJY126LBT AJY126UBTF AJYA90UBTF	AJY126LBT AJY126UBTF AJY126UBTF
32	32	32	48	48	48	48	48	48
34.0-102	36.4-109	40.0-120	42.0-126	45.2-135	48.0-144	51.0-153	54.0-162	60.0-180
3Phase 380-415V 50Hz								
68.0	72.8	80.0	84.0	90.4	96.0	102	108	120
76.5	81.5	90.0	94.5	102	108	115	122	135
22.1	22.8	26.7	26.3	29.1	30.8	33.7	35.4	40.0
21.7	22.0	26.5	25.5	28.5	30.3	33.2	35.0	39.7
3.08	3.20	3.00	3.20	3.11	3.11	3.04	3.05	3.00
3.52	3.70	3.40	3.70	3.56	3.57	3.27	3.47	3.40
10800+10700	10700 x 3	10800 x 2	10700 x 3	10800+10700 x 2	10800+10700 x 2	10800 x 2+10700	10800 x 2+10700	10800 x 3
62	62	62	62	63	63	63	64	64
64	64	64	64	65	65	65	66	66
3.0 + 4.6 +4.6 / 4.6 + 4.6	3.0 + 4.6 / 3.7 + 3.7 / 3.7 + 3.7	3.0 + 4.6 + 4.6 / 4.6 + 4.6 + 4.6 / 4.6 + 4.6	3.0 + 4.6 / 4.6 + 4.6 / 4.6 + 4.6	3.0 + 4.6 + 4.6 / 4.6 + 4.6 / 3.7 + 3.7	3.0 + 4.6 + 4.6 / 4.6 + 4.6 / 4.6 + 4.6	3.0 + 4.6 + 4.6 / 4.6 + 4.6 + 4.6 / 3.7 + 3.7	3.0 + 4.6 + 4.6 / 4.6 + 4.6 + 4.6 / 4.6 + 4.6	3.0 + 4.6 + 4.6 / 4.6 + 4.6 + 4.6 / 4.6 + 4.6
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1500   1500	1500   1500	1500   1500	1500   1500	1500   1500	1500   1500	1500   1500	1500   1500	1500   1500
1300   1300	1300   1300	1300   1300	1300   1300	1300   1300	1300   1300	1300   1300	1300   1300	1300   1300
650   650	650   650	650   650	650   650	650   650	650   650	650   650	650   650	650   650
374 + 272	269 + 272 + 272	374 + 377	269 + 272 + 272	374 + 272 + 272	374 + 272 + 272	374 + 377 + 272	374 + 377 + 272	374 + 377 + 377
15.5 + 14.0	14.0 + 14.0 + 14.0	15.5 + 15.5	14.0 + 14.0 + 14.0	15.5 + 14.0 + 14.0	15.5 + 14.0 + 14.0	15.5 + 15.5 + 14.0	15.5 + 15.5 + 14.0	15.5 + 15.5 + 15.5
ø15.88	ø15.88	ø15.88	ø19.05	ø19.05	ø19.05	ø19.05	ø19.05	ø19.05
ø34.92	ø34.92	ø34.92	ø34.92	ø34.92	ø34.92	ø41.27	ø41.27	ø41.27
-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

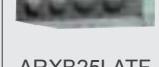
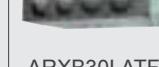
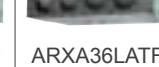
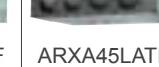
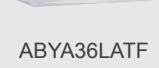
## Indoor units lineup

Capacity range (kW)	2.20	2.20	3.60	4.05	5.30	5.70	
Model code	7	9	12	14	18	20	
<b>Compact Cassette</b>							
<b>Slim Type Cassette</b>							AUYA20LATF
<b>Silent model Compact Duct</b>							
<b>Silent model Low Static Pressure Duct</b>							
<b>Duct</b>							
<b>High Static Pressure Duct</b>							
<b>Floor / Ceiling</b>							
<b>Ceiling</b>							
<b>Comfort model Compact Wall Mounted*2</b>							
	With this model, connection of EV kit is necessary.						
<b>Wall Mounted</b>							
<b>Ceiling Wall</b>							

\*1:ARXC90 model can not be connected to S series outdoor unit.

\*2:Compact wall mounted model can not be connected S series Heat Recovery outdoor unit.

11 Types, 50Models, Capacity range from 2.2kW to 25.4kW  
Indoor units of S series and V series are compatible

	6.80	7.05	8.80	10.5	12.7	14.1	17.0	25.4
	24	25	30	36	45	54	60	90
	 <b>AUYA25LATF</b>	 <b>AUYA30LATF</b>	 <b>AUYA36LATF</b>	 <b>AUYA45LATF</b>	 <b>AUYA54LATF</b>			
	 <b>ARXB25LATF</b>	 <b>ARXB30LATF</b>	 <b>ARXB36LATF</b>	 <b>ARXB45LATF</b>				
	 <b>ARXA25LATF</b>	 <b>ARXA30LATF</b>	 <b>ARXA36LATF</b>	 <b>ARXA45LATF</b>				
			 <b>ARXC36LATF</b>	 <b>ARXC45LATF</b>		 <b>ARXC60LATF</b>	 <b>ARXC90LATF*1</b>	
	 <b>ABYA24LATF</b>							
			 <b>ABYA30LATF</b>	 <b>ABYA36LATF</b>	 <b>ABYA45LATF</b>	 <b>ABYA54LATF</b>		
	 <b>ASYA24LATF</b>		 <b>ASYA30LATF</b>					
	 <b>AWYA24LATF</b>		 <b>AWYA30LATF</b>					

## Indoor units specifications

### Compact Cassette



Model name			AUXB07LATF	AUXB09LATF	AUXB12LATF	AUXB14LATF	AUXB18LATF		
Power source			220-240V 50Hz						
Capacity	Cooling	kW	2.20	2.80	3.60	4.00	5.00		
	Heating		2.50	3.20	4.10	4.50	5.45		
Input power			W						
Airflow rate	High	m³/h	530	530	580	580	640		
	Med		480	480	520	520	540		
	Low		410	410	460	460	470		
Sound pressure level	High	dB(A)	38	38	41	41	44		
	Med		35	35	37	37	38		
	Low		31	31	34	34	35		
Dimensions (H x W x D)			mm	230 x 570 x 570					
Weight			kg	18	18	18	18	18	
Connection pipe diameter	Liquid (Flare)	mm	ø6.35	ø6.35	ø6.35	ø6.35	ø9.52		
	Gas (Flare)		ø12.7	ø12.7	ø12.7	ø12.7	ø15.88		
Grille			UTG-UDYD-W (Option)						

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

### Cassette



Model name			AUYA20LATF	AUYA25LATF	AUYA30LATF	AUYA36LATF	AUYA45LATF	AUYA54LATF
Power source			220-240V 50Hz					
Capacity	Cooling	kW	5.70	7.05	8.80	10.5	12.7	14.1
	Heating		5.80	7.85	9.10	12.7	13.7	15.8
Input power			W					
Airflow rate	High	m³/h	104	124	140	175	190	219
	Med		1,000	1,100	1,250	1,500	1,550	1,700
	Low		840	940	1,050	1,300	1,350	1,420
Sound pressure level	High	dB(A)	700	780	840	1,100	1,100	1,200
	Med		41	43	46	47	48.5	51.5
	Low		37	40	43	42.5	46	47.5
Dimensions (H x W x D)	(Main body)	mm	246 x 830 x 830	246 x 830 x 830	246 x 830 x 830	296 x 830 x 830	296 x 830 x 830	296 x 830 x 830
	(With Panel)		265 x 940 x 940	265 x 940 x 940	265 x 940 x 940	315 x 940 x 940	315 x 940 x 940	315 x 940 x 940
Weight			kg	34	34	34	40	40
Connection pipe diameter	Liquid (Flare)	mm	ø9.52	ø9.52	ø9.52	ø9.52	ø9.52	ø9.52
	Gas (Flare)		ø15.88	ø15.88	ø15.88	ø19.05	ø19.05	ø19.05

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

## Compact Duct Low Static Pressure Duct Duct



Model name	ARXB07 LALF	ARXB09 LALF	ARXB12 LALF	ARXB14 LALF	ARXB18 LALF	ARXB25 LATF	ARXB30 LATF	ARXB36 LATF	ARXB45 LATF	ARXA25 LATF	ARXA30 LATF	ARXA36 LATF	ARXA45 LATF	
220-240V 50Hz														
Power source														
Capacity	Cooling Heating	kW	2.20 2.50	2.80 3.20	3.60 4.10	4.00 4.80	5.30 5.60	7.00 7.70	8.80 9.50	10.5 12.7	12.7 14.3	7.00 7.70	8.80 9.50	10.5 12.7
Input power		W	31.2	32.6	55.0	63.0	103.0	155	171	216	246	161	172	220
Airflow rate	High Med Low	m³/h	330 300 270	370 340 310	560 500 420	610 550 470	950 790 620	1,090 970 870	1,200 1,090 970	1,440 1,270 1,160	1,580 1,450 1,320	1,100 1,000 900	1,400 1,300 1,200	1,750 1,650 1,550
Static pressure range		Pa	0 to 50	0 to 80	0 to 80	0 to 80	0 to 80	30 to 150	30 to 150	30 to 150				
Sound pressure level	High Med Low	dB(A)	29 27 24	31 29 27	30 28 25	31 29 26	40 35 30	29 26 24	31 28 26	35 32 30	37 35 33	38 36 34	40 41 36	43 42 40
Dimensions (H x W x D)		mm	217x663x595	217x663x595	217x595x595	217x953x595	217x953x595	270x1,135x700	270x1,135x700	270x1,135x700	270x1,135x700	270x1,135x700	270x1,135x700	270x1,135x700
Weight		kg	18	18	25	25	25	43	43	43	45	43	43	45
Connection pipe diameter	Liquid (Flare) Gas (Flare)	mm	ø6.35 ø12.7	ø6.35 ø12.7	ø6.35 ø12.7	ø6.35 ø12.7	ø9.52 ø15.88	ø9.52 ø15.88	ø9.52 ø15.88	ø9.52 ø19.05	ø9.52 ø19.05	ø9.52 ø15.88	ø9.52 ø15.88	ø9.52 ø19.05

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

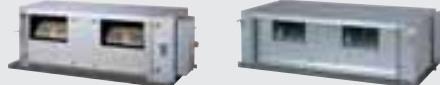
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V]; Standard static pressure : 0 Pa(ARXB07LALF,ARXB09LALF,ARXB12LALF,ARXB18LALF,ARXB25LATF,ARXB30LATF,ARXB36LATF,ARXB45LATF)

Voltage : 230 [V]; Standard static pressure :100 Pa(ARXA25LATF,ARXA30LATF,ARXA36LATF,ARXA45LATF)

## High Static Pressure Duct



Model name	ARXC36LATF	ARXC45LATF	ARXC60LATF	ARXC90LATF		
Power source	220-240V 50Hz					
Capacity	Cooling Heating	kW	10.5 12.7	12.7 14.3	17.0 18.2	25.4 29.5
Input power		W	405	427	427	970
Airflow rate	High Med Low	m³/h	2,500 1,950 1,450	3,500 3,000 2,460	3,500 3,000 2,460	3,950 -
Static pressure range		Pa	100 to 200	100 to 250	100 to 250	100 to 300
Sound pressure level	High Med Low	dB(A)	45 38 32	49 45 42	49 45 42	50 -
Dimensions (H x W x D)		mm	400 x 1,050 x 500	400 x 1,050 x 500	400 x 1,050 x 500	450 x 1,550 x 700
Weight		kg	45	45	50	82
Connection pipe diameter	Liquid (Flare) Gas (Flare)	mm	ø9.52(Flare) ø19.05 (Flare)	ø9.52 (Flare) ø19.05 (Flare)	ø9.52(Flare) ø19.05 (Flare)	ø12.7 (Brazing) ø22.22(Brazing)

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V]; Standard static pressure : 100 Pa (ARXC36LATF, ARXC45LATF, ARXC60LATF).

Voltage : 400 [V]; Standard static pressure : 200 Pa (ARXC90LATF).

## Indoor units specifications

### Floor / Ceiling



Model name		ABYA12LATF	ABYA14LATF	ABYA18LATF	ABYA24LATF
Power source		220-240V 50Hz			
Capacity	Cooling	3.60	4.05	5.30	6.60
	Heating	4.10	5.00	5.60	7.70
Input power		W	57	57	88
Airflow rate	High	640	640	780	880
	Med	560	560	650	740
	Low	480	480	550	630
Sound pressure level	High	40	40	46	48
	Med	37	37	41.5	45
	Low	34	34	37	41
Dimensions (H x W x D)		mm	199 x 990 x 655	199 x 990 x 655	199 x 990 x 655
Weight		kg	28	28	28
Connection pipe diameter	Liquid (Flare)	mm	ø6.35	ø6.35	ø9.52
	Gas (Flare)	mm	ø12.7	ø12.7	ø15.88

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

### Ceiling



Model name		ABYA30LATF	ABYA36LATF	ABYA45LATF	ABYA54LATF
Power source		220-240V 50Hz			
Capacity	Cooling	8.80	10.5	12.7	14.1
	Heating	9.10	12.7	13.7	15.8
Input power		W	124	144	160
Airflow rate	High	1,450	1,660	1,850	2,200
	Med	1,280	1,500	1,660	2,000
	Low	980	1,270	1,430	1,800
Sound pressure level	High	42	45	48	52
	Med	39	42	46	50
	Low	35	37	41	46
Dimensions (H x W x D)		mm	240 x 1,660 x 700	240 x 1,660 x 700	240 x 1,660 x 700
Weight		kg	48	48	48
Connection pipe diameter	Liquid (Flare)	mm	ø9.52	ø9.52	ø9.52
	Gas (Flare)	mm	ø15.88	ø19.05	ø19.05

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

## Compact Wall Mounted



Model name			ASYE07LACF	ASYE09LACF	ASYE12LACF	ASYE14LACF	
Power source			220-240V 50Hz				
Capacity	Cooling	kW	2.20	2.80	3.60	4.00	
	Heating		2.50	3.20	4.10	4.80	
Input power			W	13	13	17	
Airflow rate	High	m³/h	490	490	560	600	
	Med		450	450	480	490	
	Low		370	370	420	420	
Sound pressure level	High	dB(A)	34	34	38	39	
	Med		32	32	34	35	
	Low		26	26	30	30	
Dimensions (H x W x D)			mm	275 x 790 x 215	275 x 790 x 215	275 x 790 x 215	
Weight			kg	9	9	9	
Connection pipe diameter	Liquid (Flare)	mm	ø6.35	ø6.35	ø6.35	ø6.35	
	Gas (Flare)		ø12.7	ø12.7	ø12.7	ø12.7	
EV Kit			UTR-EV09XA (Option)		UTR-EV14XA (Option)		

## Wall Mounted



Model name			ASYA18LATF	ASYA24LATF	ASYA30LATF	
Power source			220-240V 50Hz			
Capacity	Cooling	kW	5.40	6.90	8.00	
	Heating		5.60	7.80	8.80	
Input power		W	38	50	60	
Airflow rate	High	m³/h	800	970	1,040	
	Med		650	870	910	
	Low		550	750	730	
Sound pressure level	High	dB(A)	41	45	47.5	
	Med		36.5	41	44	
	Low		33	37	39.5	
Dimensions (H x W x D)			mm	320 x 1,120 x 220	320 x 1,120 x 220	
Weight			kg	16	16	
Connection pipe diameter	Liquid (Flare)	mm	ø9.52	ø9.52	ø9.52	
	Gas (Flare)		ø15.88	ø15.88	ø15.88	

## Ceiling Wall



Model name			AWYA07LATF	AWYA09LATF	AWYA12LATF	AWYA14LATF	AWYA18LATF	AWYA24LATF	AWYA30LATF	
Power source			220-240V 50Hz							
Capacity	Cooling	kW	2.20	2.80	3.60	4.30	5.40	6.90	8.00	
	Heating		2.50	3.20	4.10	4.90	5.60	7.80	8.80	
Input power		W	16	19	20	21	30	40	50	
Airflow rate	High	m³/h	380	480	600	650	760	900	950	
	Med		330	420	520	570	660	780	870	
	Low		290	390	470	490	560	650	780	
Sound pressure level	High	dB(A)	34	35	35	37	40	44	47	
	Med		32	32	33	35	37	41	45	
	Low		30	30	31	32	34	37	42	
Dimensions (H x W x D)			mm	270 x 1,150 x 285						
Weight			kg	16	16	16	16	16	16	
Connection pipe diameter	Liquid (Flare)	mm	ø6.35	ø6.35	ø6.35	ø6.35	ø9.52	ø9.52	ø9.52	
	Gas (Flare)		ø12.7	ø9.52	ø12.7	ø12.7	ø15.88	ø15.88	ø15.88	

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Smart and cutting edge design  
 Extensive lineup from 8HP to 48HP  
 in 2HP increment  
 Connectable indoor unit capacity  
 ratio up to 150%

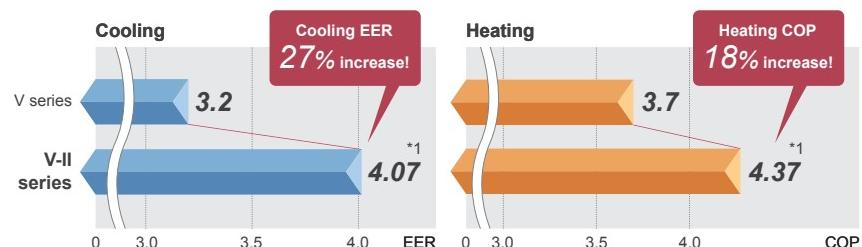


## High Efficiency

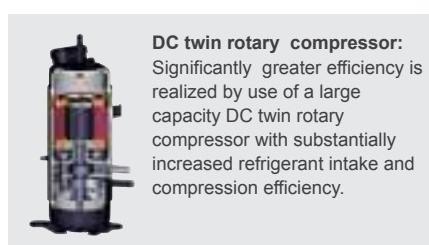
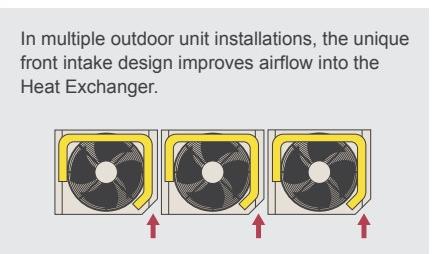
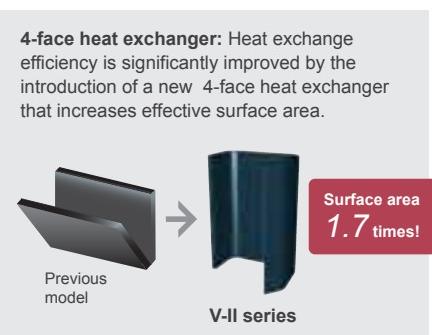
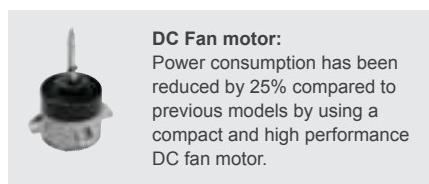
### Significantly improved EER/COP

Significantly greater efficiency is realized by the use of a DC twin rotary compressor, inverter technology, and large heat exchanger.

\* "EER/COP" is the coefficient of performance [ $=$  capacity (kW)  $\div$  input power (kW)].  
 \*EER/COP values are based on our own testing method.  
 \*1. The data refers to a 8HP outdoor unit.

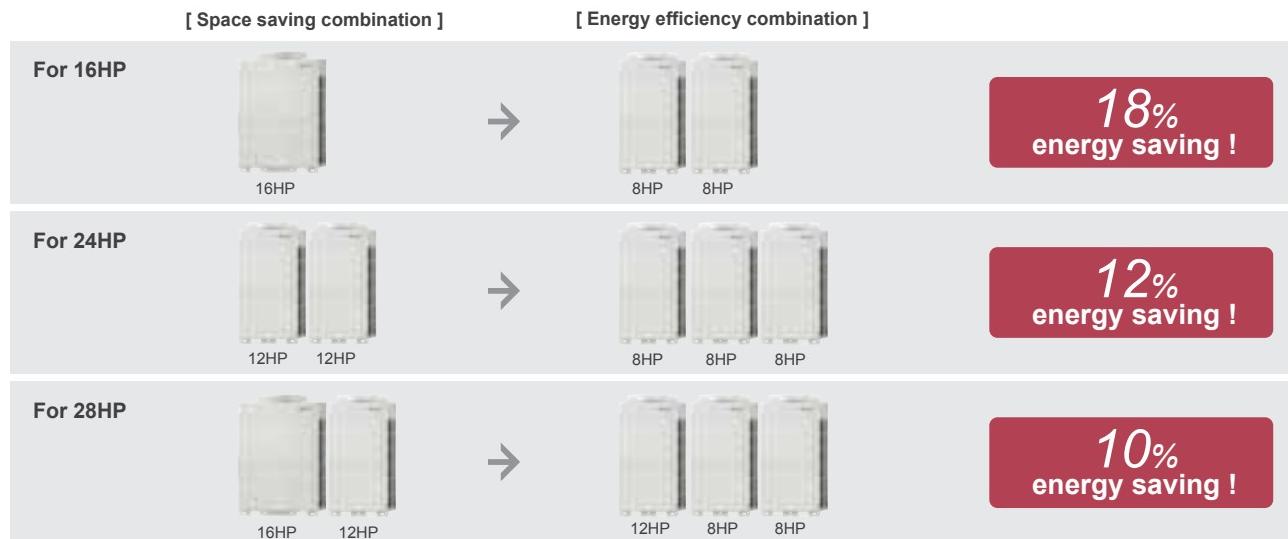


### Energy saving technology that boosted operation efficiency



# Energy Efficiency Combination

## Choice of space saving or energy efficiency combinations

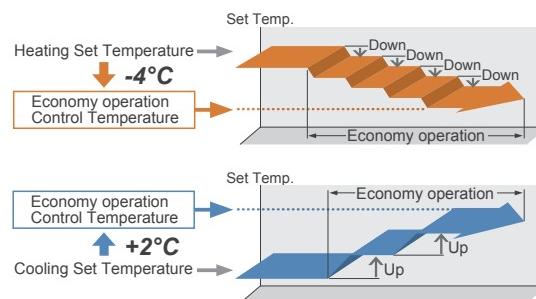


(Comparison of Average COP)

# Various Energy Saving Features

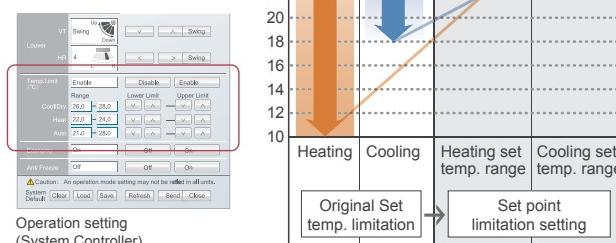
## Economy operation

Economy operation can be set by remote controller. The temperature setting is offset automatically over a certain period of time.



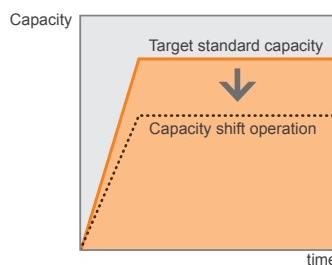
## Room temperature set point limitation

The minimum and maximum temperature range can be set giving further energy saving while considering the comfort of the occupants.



## Capacity shift operation

When the heat load is minimal, capacity can be reduced according to surrounding conditions.



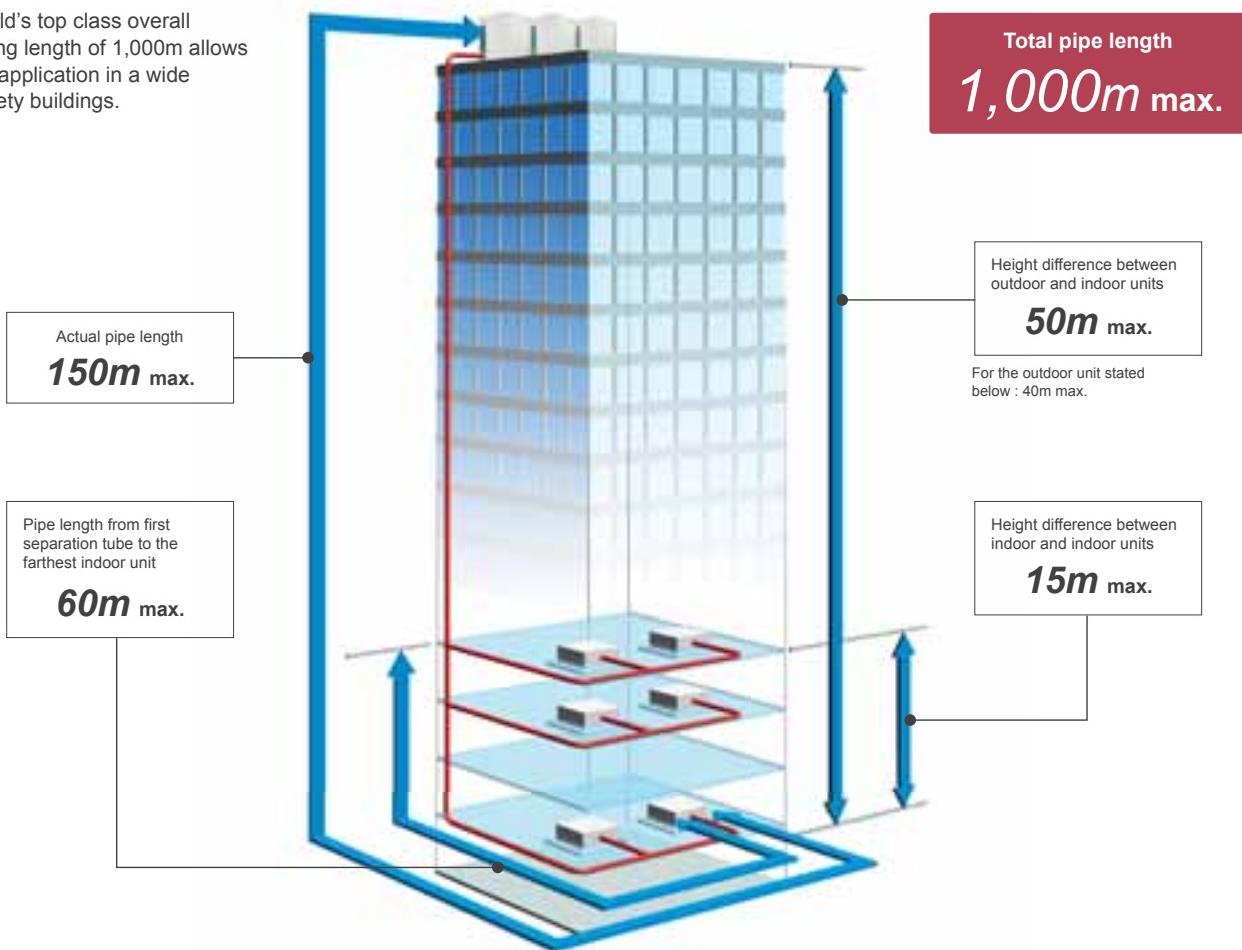
## Auto-off timer

Each remote controller is equipped with an OFF timer function that automatically stops operation when a fixed time has elapsed from the start of operation. This prevents wasteful operation. (NB Except simple remote controller)

## Design Versatility

### Overall piping length 1,000m

World's top class overall piping length of 1,000m allows for application in a wide variety buildings.



### High static pressure of 80Pa

The outdoor unit can have a condenser hood easily connected with a static pressure of 80Pa standard. This allows outdoor units to be installed within plant rooms in high rise buildings.

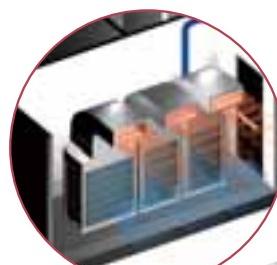
Powerful discharge with an external static pressure of 80Pa.

**80Pa**  
as standard

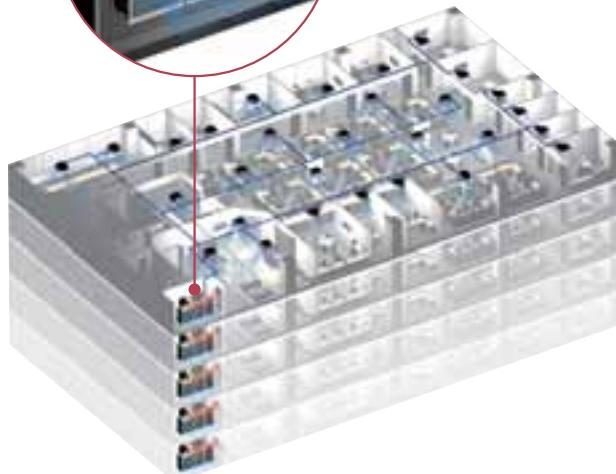
Previous model



V-II series



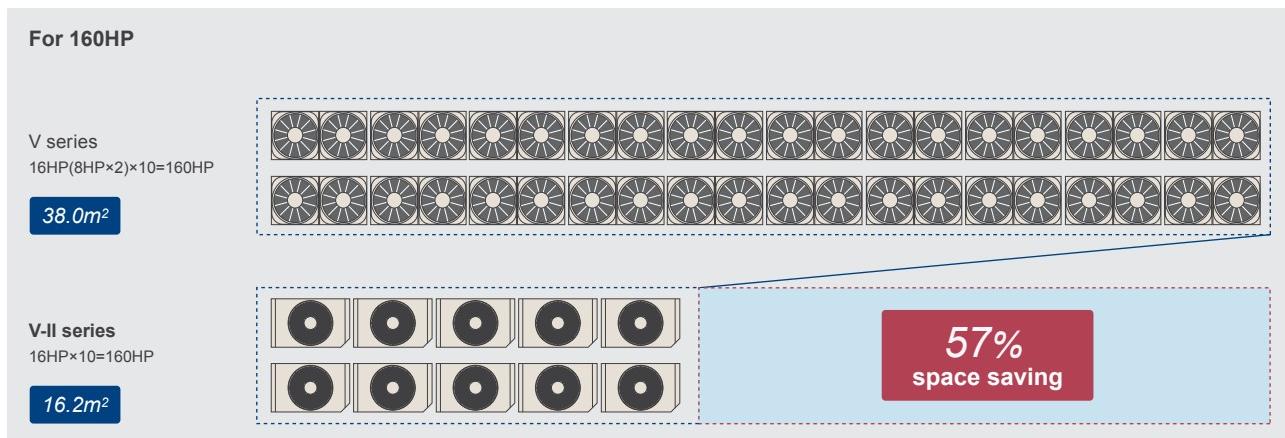
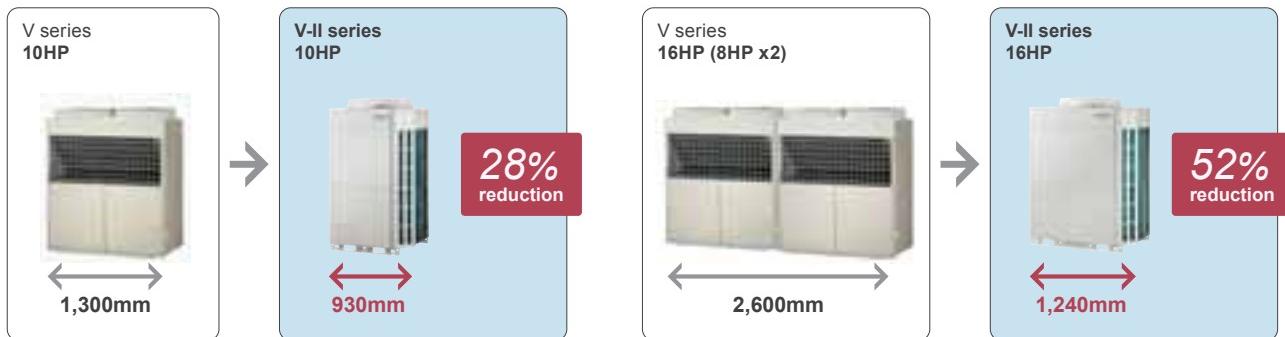
Installation Example



Large diameter fan and DC motor has been utilized allowing an external static pressure of 80Pa. This is approximately 2.6 times greater than the previous model.

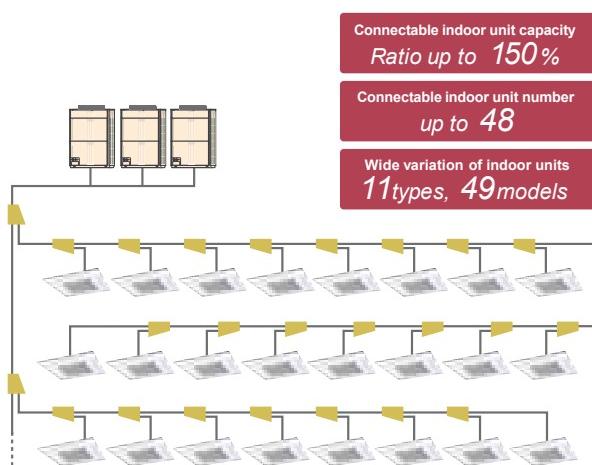
## Space saving and compact size

Compact size has been achieved by significantly reducing the width of the outdoor units compared to previous models.



## High capacity connection

Various combination from 8HP to 48HP with 2HP increments. 11 types, 49 models of indoor units can be selected ranging from 2.2kW to 25kW in capacity. A maximum of 150% indoor unit connectable capacity.



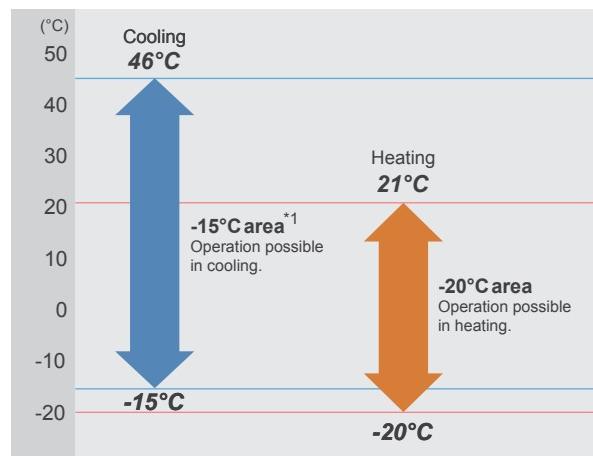
Note : when indoor unit connected capacity is greater than 100%, individual indoor units will operate at a slightly lower capacity when maximum capacity is required.

## Wide operating range

Installation in extreme temperature conditions is possible due to an increase in operational range.

Cooling : -15°C~46°C

Heating : -20°C~21°C



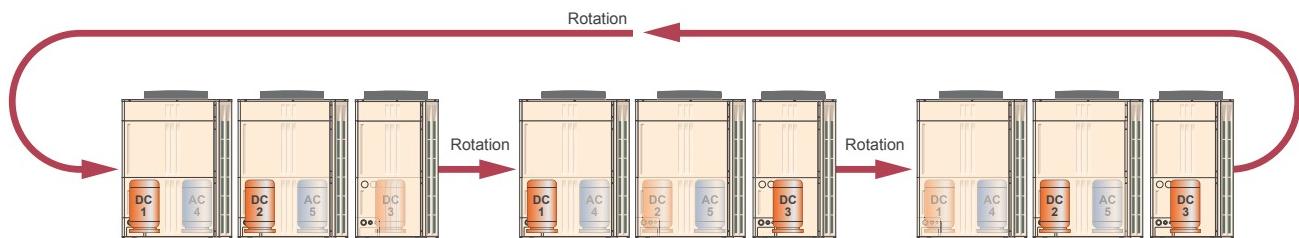
\*1 Note : When a multiple outdoor unit connection is used, operating range is from -5°C to 46°C in cooling.

## High Reliability

### Longer lasting units

#### Outdoor unit operation rotation

The compressor starting order is rotated so that the running time is shared.



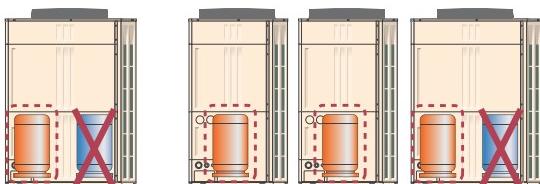
Note: The inverter compressors start in priority. Rotate operation is alternated by the start / stop timing of the compressors

### Continuous operation

If one of two compressors malfunctions, it will not affect the operation of the remaining outdoor units.

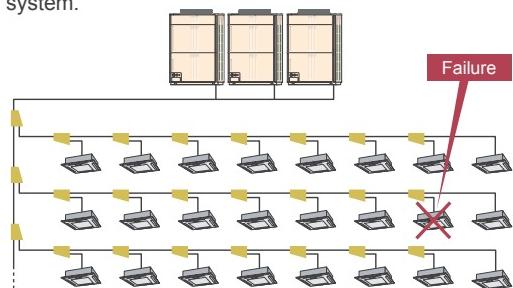
#### Outdoor Units

If one of compressors fails, emergency operation will be performed by the remaining compressors.



#### Indoor unit continuous operation

Each indoor unit is controlled individually on the system network. This allows all indoor units to continue to operate unaffected even if an error should occur at any indoor unit's on the VRF system.



### Adoption of blue fin heat exchanger

Corrosion resistant of the heat exchanger has been improved by the introduction of blue fin treatment to the outdoor unit's heat exchanger.



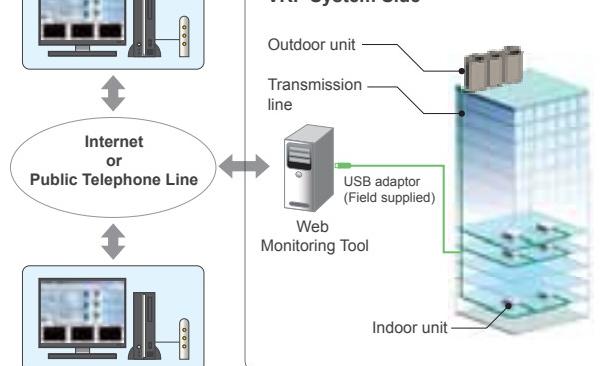
### Remote monitoring

The Web Monitoring system allows you view system operation at all times over the internet ensuring trouble free operation.

#### Monitoring Side



#### VRF System Side



The operating VRF system in the building can be monitored in real time over the Internet.

# Easy Installation

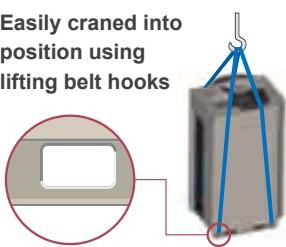
## Easily transported

Light weight

**20% weight reduction**  
(Than Previous model)

Note:  
In the case of 14HP

Easily craned into position using lifting belt hooks



Can be transported in a small elevator

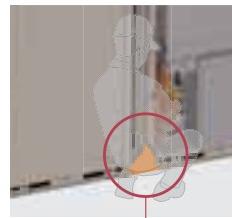


Design of outdoor unit allows for lifting straps to be used

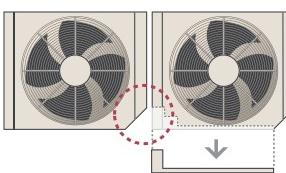
Transporting by forklift

## Easy access

By adopting a L-Shape front panel that can be removed, the work space for installation and service has been significantly expanded by this new design. For multiple installations, work is performed easily and efficiently even in a narrow space.



Expansion of work space

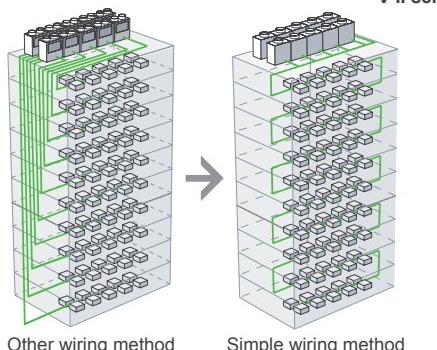


## Simple signal line connection

Installation is made easier as the communications wiring can be connected continuously to any component.

**Up to maximum length 3,600m**

V-II series



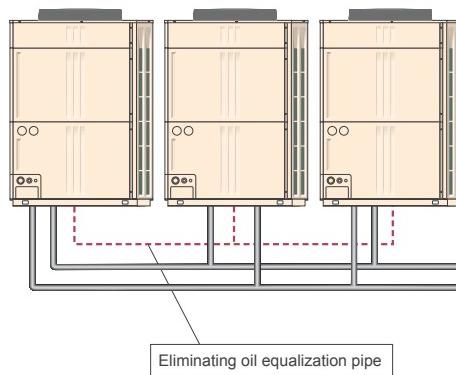
Other wiring method

Simple wiring method

Note: In a multiple refrigerant system installation, Automatic addressing sequence cannot be initiated

## Easy piping connection

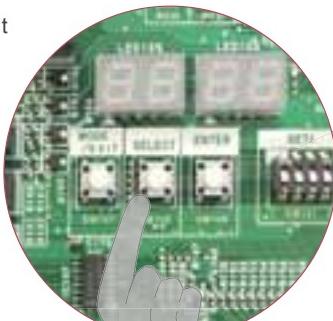
The need for a oil equalization pipe as required on the previous model has been removed. The installation costs have been reduced by employing a simple 2 pipe connection



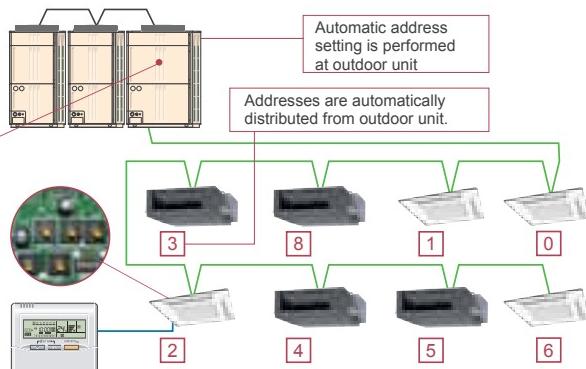
Eliminating oil equalization pipe

## Automatic address setting

The address of each indoor unit can be automatically set by button switch of outdoor unit.



Press the pushbutton switch of outdoor unit.

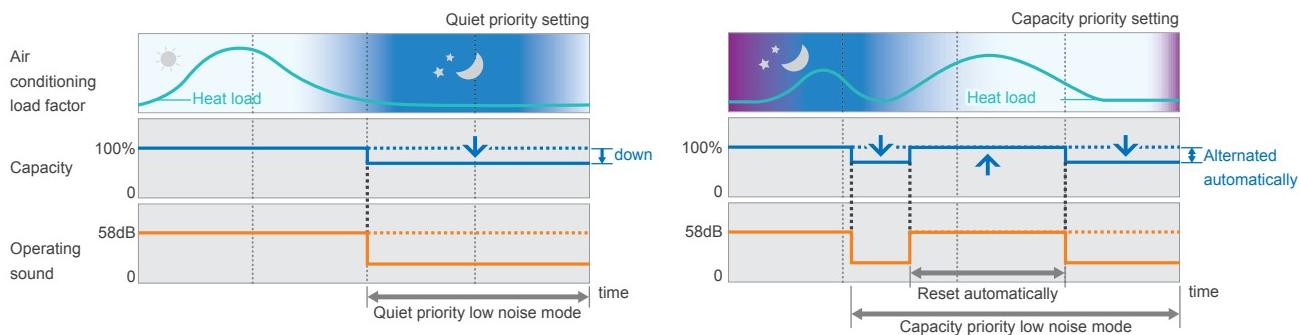


Manual address setting from indoor unit and remote controller is also possible.

## Comfort and Convenience

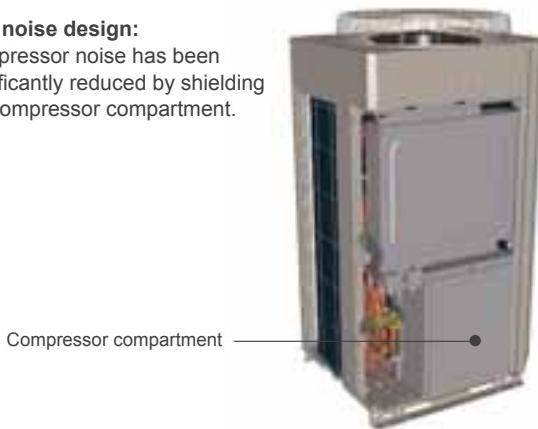
### Quiet operation

**Low noise mode:** Two low noise modes can be selected automatically by quiet priority setting and capacity priority setting depending on the usage environment and outside temperature load.



#### Low noise design:

Compressor noise has been significantly reduced by shielding the compressor compartment.



#### Indoor unit: Low noise indoor unit lineup



### Auto changeover function

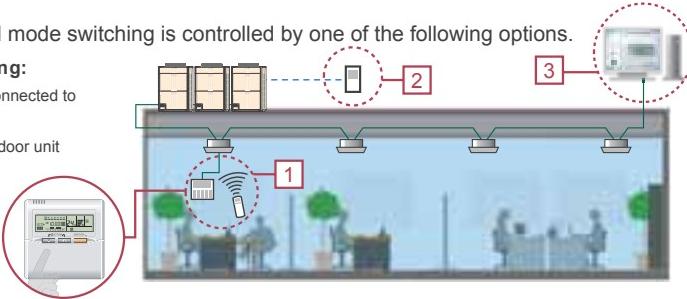
Auto changeover setting allows for the product to easily switch between Cooling and heating modes regardless of the operation mode of other indoor units. This can be done via specific indoor unit remote controller and / or by an external input control. This ensures comfortable operation all year round.

Command for operational mode switching is controlled by one of the following options.

#### 1 selected from the following:

- [1] Various remote controllers connected to indoor unit
- [2] External input terminal of outdoor unit
- [3] System controller

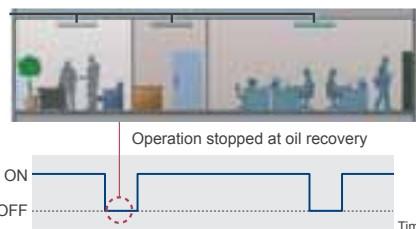
Switching to cooling and heating mode by specific remote controller in the main room, etc.



### Non-stop oil recovery operation

A comfortable room condition is maintained during oil recovery mode because the product continues to operate without stopping the cooling or heating operation.

#### Previous model



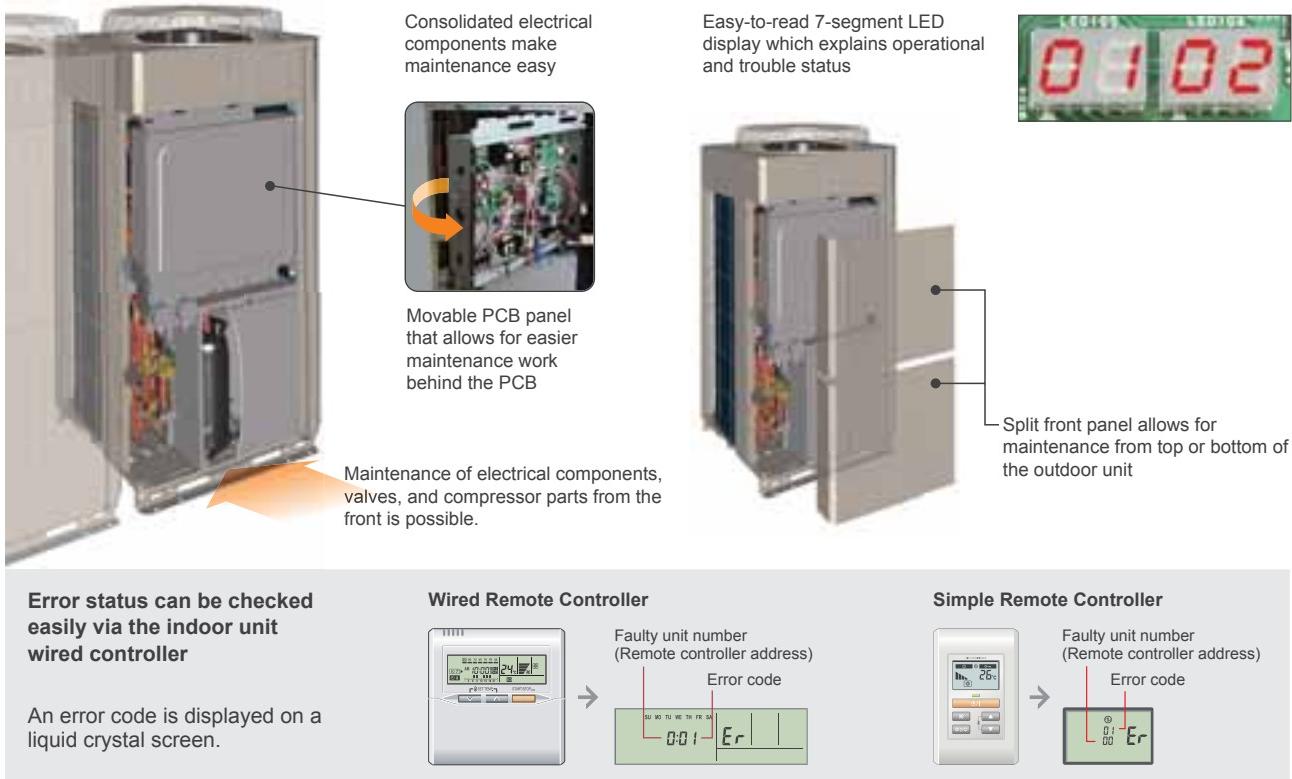
#### V-II series



# Easy Service & Maintenance

## Design for easy service and maintenance

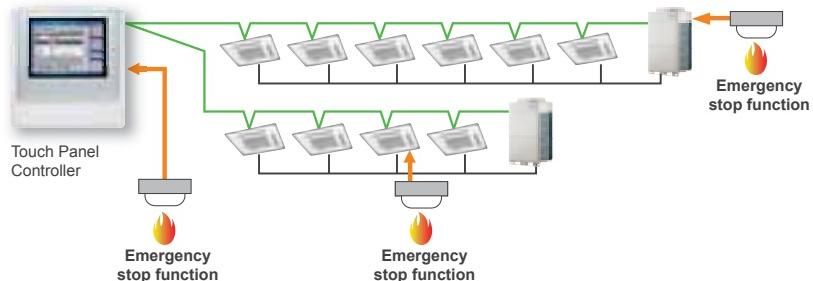
Inspection and replacement of main parts is easier due to innovative construction and an LED operational display.



## Emergency stop function

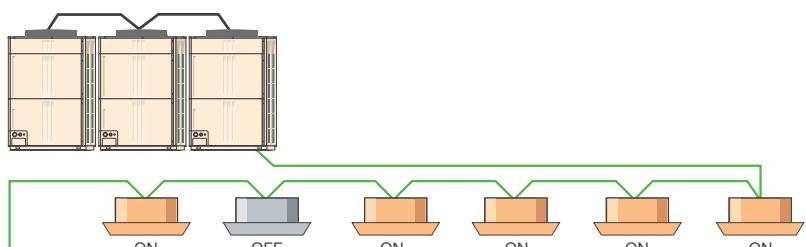
Emergency alarm can be received by indoor, outdoor units or Touch Panel Controller when they received it, all units will be stopped.

**Note:**  
In case of received Emergency alarm by indoor/outdoor unit:  
All units connected within same refrigerant system will be stopped. Touch Panel Controller: all unit connected within VRF network system with Touch Panel Controller will be stopped.



## Continuous operation during maintenance

**Non-stop operation:** When servicing a specific indoor unit, maintenance can be performed even without turning off the other indoor units.



## Outdoor units lineup

•Combinations other than the followings are not recommended.

Space saving combination				
22.4kW (8HP)  AJY-A72LALH UNIT : AJY-A72LALH	28.0kW (10HP)  AJY-A90LALH UNIT : AJY-A90LALH	33.5kW (12HP)  AJY-108LALH UNIT : AJY-108LALH	40.0kW (14HP)  AJY-126LALH UNIT : AJY-126LALH	45.0kW (16HP)  AJY-144LALH UNIT : AJY-144LALH
50.4kW (18HP)  AJY-162LALH UNIT : AJY-A90/A72LALH	55.9kW (20HP)  AJY-180LALH UNIT : AJY-108/A72LALH	61.5kW (22HP)  AJY-198LALH UNIT : AJY-108/A90LALH	67.0kW (24HP)  AJY-216LALH UNIT : AJY-108/108LALH	73.5kW (26HP)  AJY-234LALH UNIT : AJY-126/108LALH
78.5kW (28HP)  AJY-252LALH UNIT : AJY-144/108LALH	85.0kW (30HP)  AJY-270LALH UNIT : AJY-144/126LALH	90.0kW (32HP)  AJY-288LALH UNIT : AJY-144/144LALH	95.0kW (34HP)  AJY-306LALH UNIT : AJY-108/108/A90LALH	100.5kW (36HP)  AJY-324LALH UNIT : AJY-108/108/108LALH
107.0kW (38HP)  AJY-342LALH UNIT : AJY-126/108/108LALH	112.0kW (40HP)  AJY-360LALH UNIT : AJY-144/108/108LALH	118.5kW (42HP)  AJY-378LALH UNIT : AJY-144/126/108LALH	123.5kW (44HP)  AJY-396LALH UNIT : AJY-144/144/108LALH	130.0kW (46HP)  AJY-414LALH UNIT : AJY-144/144/126LALH
135.0kW (48HP)  AJY-432LALH UNIT : AJY-144/144/144LALH				

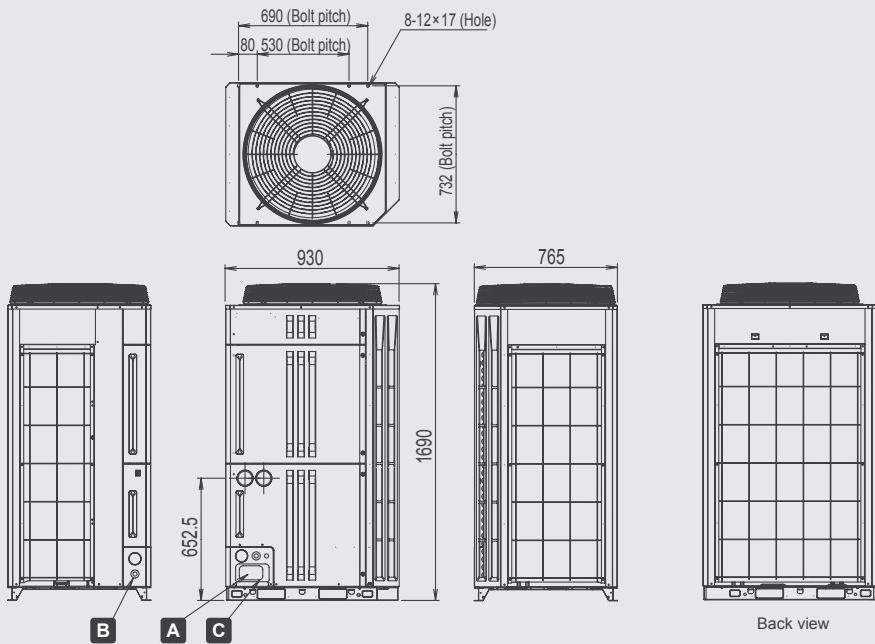
Energy efficiency combination				
44.8kW (16HP)  AJY-144LALHH UNIT : AJY-A72/A72LALH	62.4kW (22HP)  AJY-198LALHH UNIT : AJY-126/A72LALH	67.2kW (24HP)  AJY-216LALHH UNIT : AJY-A72/A72/A72LALH	72.8kW (26HP)  AJY-234LALHH UNIT : AJY-A90/A72/A72LALH	78.3kW (28HP)  AJY-252LALHH UNIT : AJY-108/A72/A72LALH
84.8kW (30HP)  AJY-270LALHH UNIT : AJY-126/A72/A72LALH	89.8kW (32HP)  AJY-288LALHH UNIT : AJY-108/108/A72LALH	95.9kW (34HP)  AJY-306LALHH UNIT : AJY-126/108/A72LALH	102.4kW (36HP)  AJY-324LALHH UNIT : AJY-126/126/A72LALH	113.5kW (40HP)  AJY-360LALHH UNIT : AJY-126/126/A108LALH
120.0kW (42HP)  AJY-378LALHH UNIT : AJY-126/126/126LALH	125.0kW (44HP)  AJY-396LALHH UNIT : AJY-144/126/126LALH			

## Outdoor units dimensions

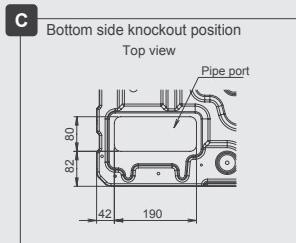
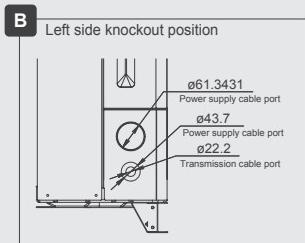
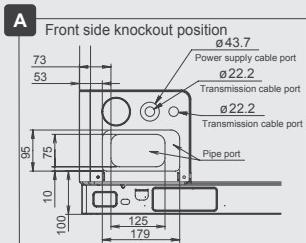
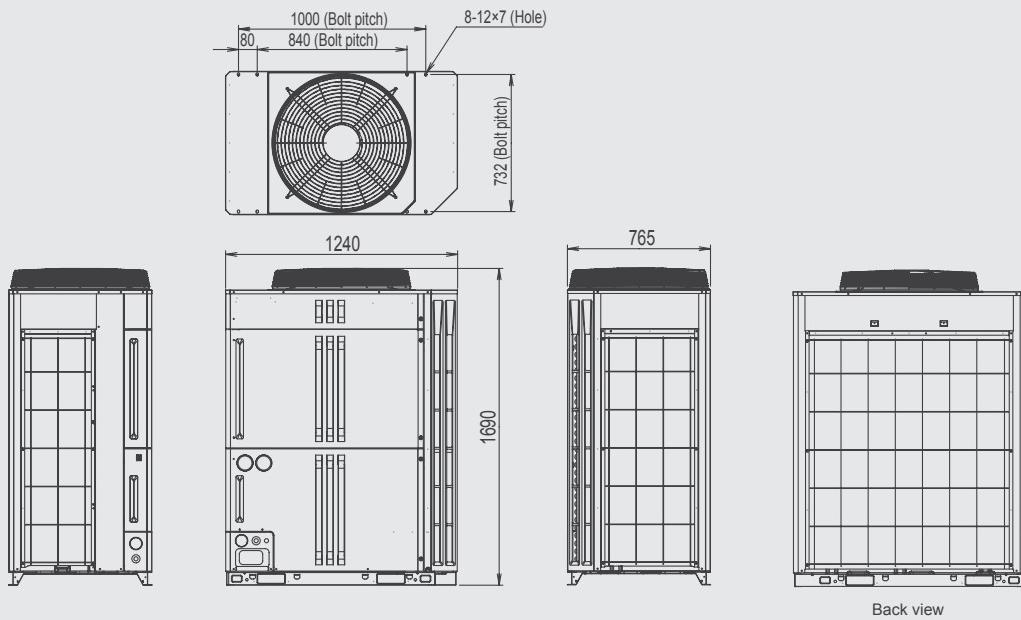
### Dimensions

(Unit : mm)

8,10,12HP: AJY-A72LALH / AJY-A90LALH / AJY-108LALH



14,16HP: AJY-126LALH / AJY-144LALH



## Outdoor units specifications

### Space Saving Combination

Rating Capacity range	HP	8	10	12	14	16	18	20	22	24
Model name		AJYA72LALH	AJYA90LALH	AJY108LALH	AJY126LALH	AJY144LALH	AJY162LALH	AJY180LALH	AJY198LALH	AJY216LALH
Unit 1		AJYA72LALH	AJYA90LALH	AJY108LALH	AJY126LALH	AJY144LALH	AJYA90LALH	AJY108LALH	AJY108LALH	AJY108LALH
Unit 2						AJYA72LALH	AJYA72LALH	AJYA90LALH	AJY108LALH	
Unit 3										
Maximum Connectable Indoor Unit*1		15	16	17	21	24	32	32	32	35
Indoor unit connectable capacity	Cooling kW	11.2-33.6	14.0-42.0	16.8-50.2	20.0-60.0	22.4-67.2	25.2-75.6	28.0-83.9	30.8-92.3	33.5-100.5
Power source		3-phase 4 wire, 400 V, 50Hz								
Capacity	Cooling kW	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0
	Heating kW	25.0	31.5	37.5	45.0	50.0	56.5	62.5	69.0	75.0
Input power	Cooling kW	5.51	7.73	9.62	11.53	14.17	13.24	15.13	17.35	19.24
	Heating kW	5.72	7.83	9.28	11.45	12.60	13.55	15.00	17.11	18.56
EER	Cooling W/W	4.07	3.62	3.48	3.47	3.18	3.81	3.69	3.54	3.48
COP	Heating W/W	4.37	4.02	4.04	3.93	3.97	4.17	4.17	4.03	4.04
Air flow rate	High m³/h	11,100	11,100	11,100	13,000	13,000	11,100 x 2	11,100 x 2	11,100 x 2	11,100 x 2
Sound pressure level*2	Cooling dB	56	58	58	60	61	60	60	61	61
	Heating (A)	58	59	60	61	61	62	62	63	63
Maximum external static pressure	Pa	80	80	80	80	80	80	80	80	80
Compressor motor output	kW	3.9	3.9	3.9 + 4.5	3.9 + 4.5	3.9 + 4.5	3.9 x 2	3.9 x 2 + 4.5	3.9 x 2 + 4.5	3.9 x 2 + 4.5 x 2
Heat exchanger fin		Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width mm	930	930	930	1,240	1,240	930 x 2	930 x 2	930 x 2	930 x 2
	Depth mm	765	765	765	765	765	765	765	765	765
Weight	kg	220	220	275	296	296	220 + 220	275 + 220	275 + 220	275 + 275
Refrigerant charge	kg	11.2	11.2	11.8	11.8	11.8	11.2 x 2	11.8 + 11.2	11.8 + 11.2	11.8 x 2
Connection pipe diameter	Liquid mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88
	Gas mm	22.20	22.20	28.58	28.58	28.58	28.58	28.58	34.92	34.92
Operation range	Cooling °C	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating °C	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

### Energy Efficiency Combination

Rating Capacity range	HP	16	22	24	26	28	30
Model name		AJY144LALHH	AJY198LALHH	AJY216LALHH	AJY234LALHH	AJY252LALHH	AJY270LALHH
Unit 1		AJYA72LALH	AJY126LALH	AJY72LALH	AJYA90LALH	AJY108LALH	AJY126LALH
Unit 2		AJYA72LALH	AJYA72LALH	AJYA72LALH	AJYA72LALH	AJYA72LALH	AJYA72LALH
Unit 3							
Maximum Connectable Indoor Unit*1		30	33	36	39	42	45
Indoor unit connectable capacity	Cooling kW	22.4-67.2	31.2-93.6	33.6-100.8	36.4-109.2	39.2-117.4	42.4-127.2
Power source		3-phase 4 wire, 400 V, 50Hz					
Capacity	Cooling kW	44.8	62.4	67.2	72.8	78.3	84.8
	Heating kW	50.0	70.0	75.0	81.5	87.5	95.0
Input power	Cooling kW	11.02	17.04	16.53	18.75	20.64	22.55
	Heating kW	11.44	17.17	17.16	19.27	20.72	22.89
EER	Cooling W/W	4.07	3.66	4.07	3.88	3.79	3.76
COP	Heating W/W	4.37	4.08	4.37	4.23	4.22	4.15
Air flow rate	High m³/h	11,100 x 2	13,000 + 11,100	11,100 x 3	11,100 x 3	11,100 x 3	13,000 + 11,000 x 2
Sound pressure level*2	Cooling dB	59	61	61	62	62	63
	Heating (A)	59	62	61	62	63	63
Maximum external static pressure	Pa	80	80	80	80	80	80
Compressor motor output	kW	3.9 x 2	3.9 x 2 + 4.5	3.9 x 3	3.9 x 3	3.9 x 3 + 4.5	3.9 x 3 + 4.5
Heat exchanger fin		Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height mm	1,690	1,690	1,690	1,690	1,690	1,690
	Width mm	930 x 2	930 + 1,240	930 x 3	930 x 3	930 x 3	930 x 2 + 1,240
	Depth mm	765	765	765	765	765	765
Weight	kg	220 + 220	296 + 220	220 + 220 + 220	220 + 220 + 220	275 + 220 + 220	296 + 220 + 220
Refrigerant charge	kg	11.2 x 2	11.8 + 11.2	11.2 x 3	11.2 x 3	11.8 + 11.2 x 2	11.8 + 11.2 x 2
Connection pipe diameter	Liquid mm	12.70	15.88	15.88	15.88	15.88	19.05
	Gas mm	28.58	34.92	34.92	34.92	34.92	34.92
Operation range	Cooling °C	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating °C	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

When cooling operation will be conducted at outdoor air temperature below -5°C, the outdoor unit must be installed in a position that is higher than or equal to those of indoor units.

26	28	30	32	34	36	38	40	42	44	46	48
AJY234LALH	AJY252LALH	AJY270LALH	AJY288LALH	AJY306LALH	AJY324LALH	AJY342LALH	AJY360LALH	AJY378LALH	AJY396LALH	AJY414LALH	AJY432LALH
AJY126LALH AJY108LALH	AJY144LALH AJY108LALH	AJY144LALH AJY126LALH	AJY144LALH AJY144LALH	AJY108LALH AJY108LALH	AJY108LALH AJY108LALH	AJY126LALH AJY108LALH	AJY144LALH AJY108LALH	AJY144LALH AJY108LALH	AJY144LALH AJY108LALH	AJY144LALH AJY108LALH	AJY144LALH AJY126LALH
39	42	45	48	48	48	48	48	48	48	48	48
36.8-110.3	39.3-117.8	42.5-127.5	45.0-135.0	47.5-142.5	50.3-150.8	53.5-160.5	56.0-168.0	59.3-177.8	61.8-185.3	65.0-195.0	67.5-202.5
3-phase 4 wire, 400 V, 50Hz											
73.5	78.5	85.0	90.0	95.0	100.5	107.0	112.0	118.5	123.5	130.0	135.0
82.5	87.5	95.0	100.0	106.5	112.5	120.0	125.0	132.5	137.5	145.0	150.0
21.15	23.79	25.70	28.34	26.97	28.86	30.77	33.41	35.32	37.96	39.87	42.51
20.73	21.88	24.05	25.20	26.39	27.84	30.01	31.16	33.33	34.48	36.65	37.80
3.48	3.30	3.31	3.18	3.52	3.48	3.48	3.35	3.36	3.25	3.26	3.18
3.98	4.00	3.95	3.97	4.04	4.04	4.00	4.01	3.98	3.99	3.96	3.97
13,000 + 11,100	13,000 + 11,100	13,000 x 2	13,000 x 2	11,100 x 3	11,100 x 3	13,000 + 11,100 x 2	13,000 + 11,100 x 2	13,000 + 11,100 x 2	13,000 x 2 + 11,100	13,000 x 2 + 11,100	13,000 x 3
62	63	64	64	63	63	64	64	65	65	65	66
64	64	64	64	64	65	65	65	65	65	66	66
80	80	80	80	80	80	80	80	80	80	80	80
3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 3					
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
930 + 1,240	930 + 1,240	1,240 x 2	1,240 x 2	930 x 3	930 x 3	930 x 2 + 1,240	930 x 2 + 1,240	930 + 1,240 x 2	930 + 1,240 x 2	1,240 x 3	1,240 x 3
765	765	765	765	765	765	765	765	765	765	765	765
296 + 275	296 + 275	296 + 296	296 + 296	275 + 275 + 220	275 + 275 + 275	296 + 275 + 275	296 + 275 + 275	296 + 275 + 275	296 + 296 + 275	296 + 296 + 296	296 + 296 + 296
11.8 x 2	11.8 x 2	11.8 x 2	11.8 x 2	11.8 x 2 + 11.2	11.8 x 3						
15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27
-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

32	34	36	40	42	44
AJY288LALHH	AJY306LALHH	AJY324LALHH	AJY360LALHH	AJY378LALHH	AJY396LALHH
AJY108LALH AJY108LALH AJY108LALH	AJY126LALH AJY126LALH AJY126LALH	AJY126LALH AJY126LALH AJY126LALH	AJY126LALH AJY126LALH AJY108LALH	AJY126LALH AJY126LALH AJY126LALH	AJY144LALH AJY126LALH AJY126LALH
48	48	48	48	48	48
44.7-134.1	48.0-143.8	51.2-153.6	56.8-170.2	60.0-180.0	62.5-187.5
3-phase 4 wire, 400 V, 50Hz					
89.4	95.9	102.4	113.5	120.0	125.0
100.0	107.5	115.0	127.5	135.0	140.0
24.75	26.66	28.57	32.68	34.59	37.23
24.28	26.45	28.62	32.18	34.35	35.50
3.61	3.60	3.58	3.47	3.47	3.36
4.12	4.06	4.02	3.96	3.93	3.94
11,100 x 3	13,000 + 11,100 x 2	13,000 x 2 + 11,100	13,000 x 2 + 11,100	13,000 x 3	13,000 x 3
62	63	64	64	65	65
64	64	65	65	66	66
80	80	80	80	80	80
3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3
Blue fin					
1,690	1,690	1,690	1,690	1,690	1,690
930 x 3	930 x 2 + 1,240	930 + 1,240 x 2	930 + 1,240 x 2	1,240 x 3	1,240 x 3
765	765	765	765	765	765
275 + 275 + 220	296 + 275 + 220	296 + 296 + 220	296 + 296 + 275	296 + 296 + 296	296 + 296 + 296
11.8 x 2 + 11.2	11.8 x 2 + 11.2	11.8 x 2 + 11.2	11.8 x 3	11.8 x 3	11.8 x 3
19.05	19.05	19.05	19.05	19.05	19.05
34.92	34.92	41.27	41.27	41.27	41.27
-5 to 46					
-20 to 21					

\*1 Minimum connectable indoor unit number is 2.

However ARXC72 and ARXC90 can be used signal connection.

\*2 The noise value is the value when measured in an anechoic room.

When measured in the actual installed state, surrounding noise and reflections are received and the measured value is usually larger than the indicated value.

\* : Data were not available at time of publication.

## Indoor units lineup

Capacity range (kW)	2.20	2.80	3.60	4.50	5.60
Model code	7	9	12	14	18
<b>Compact Cassette</b>					
<b>Cassette</b>					
<b>Compact Duct</b>					
<b>Low Static Pressure Duct</b>					
<b>Duct</b>					
<b>High Static Pressure Duct</b>					
<b>Floor / Ceiling</b>					
<b>Ceiling</b>					
<b>Compact Wall Mounted (EEV internal)</b>					
<b>Compact Wall Mounted (EEV external)</b>					
	ASYA07LACH	ASYA09LACH	ASYA12LACH	ASYA14LACH	
	ASYE07LACH	ASYE09LACH	ASYE12LACH	ASYE14LACH	
	With this model, connection of EV kit is necessary.				
<b>Wall Mounted</b>					
				ASYA18LATH	ASYA24LATH

	7.10	9.00	11.2	12.5	14.0	18.0	22.4	25.0
	24	30	36	45	54	60	72	90
AUXB24LALH								
AUXD24LALH		AUXA30LALH	AUXA36LALH	AUXA45LALH	AUXA54LALH			
ARXB24LATH		ARXB30LATH	ARXB36LATH	ARXB45LATH				
ARXA24LATH		ARXA30LATH	ARXA36LATH	ARXA45LATH				
		ARXC36LATH	ARXC45LATH		ARXC60LATH	ARXC72LATH	ARXC90LATH	
ABYA24LATH								
		ABYA30LATH	ABYA36LATH	ABYA45LATH	ABYA54LATH			
ASYA30LATH								

## Indoor units specifications

### Compact Cassette



Model name			AUXB07LALH	AUXB09LALH	AUXB12LALH	AUXB14LALH	AUXB18LALH	AUXB24LALH	
Power source			230V-50Hz						
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	
	Heating		2.8	3.2	4.1	5.0	6.3	8.0	
Input power			W						
Airflow rate	High	m³/h	540	550	600	680	710	1,030	
	Med		450	450	530	590	580	830	
	Low		350	350	390	390	400	450	
Sound pressure level	High	dB(A)	34	35	37	38	41	50	
	Med		30	30	34	34	35	44	
	Low		25	25	27	27	27	30	
Dimensions (H x W x D)			mm						
Weight			kg						
Connection pipe diameter	Liquid (Flare)	mm	15						
	Gas (Flare)		ø6.35						
	Drain		ø12.70						
Grille(option)	Model name	mm	ø25 (I.D.); ø32 (O.D.)						
	Dimensions (H x W x D)		UTG-UFYC-W						
	Weight		50 x 700 x 700						
			kg						
			2.6						

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

### Cassette



Model name			AUXD18LALH	AUXD24LALH	AUXA30LALH	AUXA36LALH	AUXA45LALH	AUXA54LALH	
Power source			230V-50Hz						
Capacity	Cooling	kW	5.6	7.1	9.0	11.2	12.5	14.0	
	Heating		6.3	8.0	10.0	12.5	14.0	16.0	
Input power			W						
Airflow rate	High	m³/h	39	46	59	80	99	119	
	Med		1,150	1,280	1,600	1,800	1,900	2,000	
	Low		940	1,040	1,300	1,300	1,370	1,370	
Sound pressure level	High	dB(A)	870	870	1,000	1,000	1,000	1,000	
	Med		36	38	40	44	46	47	
	Low		30	33	38	38	39	39	
Dimensions (H x W x D)			mm						
Weight			kg						
Connection pipe diameter	Liquid (Flare)	mm	246 x 840 x 840						
	Gas (Flare)		288 x 840 x 840						
	Drain		23						
Grille(option)	Model name	mm	ø9.52						
	Dimensions (H x W x D)		UTG-UGYA-W						
	Weight		50 x 950 x 950						
			kg						
			5.5						

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

## Compact Duct Low Static Duct Duct



Model name	ARXB07 LALH	ARXB09 LALH	ARXB12 LALH	ARXB14 LALH	ARXB18 LALH	ARXB24 LATH	ARXB30 LATH	ARXB36 LATH	ARXB45 LATH	ARXA24 LATH	ARXA30 LATH	ARXA36 LATH	ARXA45 LATH		
230V-, 50Hz															
Power source															
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	12.5	7.1	9.0	11.2	12.5
	Heating		2.8	3.2	4.1	5.0	6.3	8.0	10.0	12.5	14.0	8.0	10.0	12.5	14.0
Input power		W	46	55	63	90	96	145	198	253	338	190	188	312	312
Airflow rate	High	m³/h	370	440	590	800	890	1,100	1,410	1,710	1,970	1,280	1,280	1,720	1,720
	Med		310	370	500	750	810	920	1,280	1,600	1,790	1,210	1,210	1,670	1,670
	Low		280	340	450	700	730	810	1,150	1,470	1,670	1,130	1,130	1,600	1,600
Static pressure range		Pa	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50	0 to 80	0 to 80	0 to 80	0 to 80	30 to 150	30 to 150	30 to 150	30 to 150
Standard static pressure		Pa	25	25	25	25	25	40	50	50	60	100	100	100	100
Sound pressure level	High	dB(A)	29	31	30	33	36	31	34	37	41	38	40	43	43
	Med		26	29	28	32	34	27	32	35	38	36	38	41	41
	Low		24	27	25	30	30	25	29	33	36	34	36	39	39
Dimensions (H x W x D)		mm	217 x 663 x 595		217 x 953 x 595			270 x 1,135 x 700				270 x 1,135 x 700			
Weight		kg	18		25		43		45		43		45		
Connection pipe diameter	Liquid (Flare)	mm		ø6.35		ø9.52		ø9.52				ø9.52			
	Gas (Flare)	mm		ø12.70		ø15.88		ø15.88		ø19.05		ø15.88		ø19.05	
	Drain			ø25 (I.D.) ; ø32 (O.D.)				ø25 (I.D.) ; ø32 (O.D.)				ø25 (I.D.) ; ø32 (O.D.)			

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

## High Static Pressure Duct



Model name	ARXC36LATH	ARXC45LATH	ARXC60LATH	ARXC72LATH	ARXC90LATH		
230 V-, 50Hz							
Power source							
Capacity	Cooling	kW	11.2	12.5	18.0	22.4	25.0
	Heating		12.5	14.0	20.0	25.0	28.0
Input power		W	405	427	427	1,110	1,250
Airflow rate	High	m³/h	2,600	3,500	3,500	3,900	4,300
	Med		1,950	3,000	3,000	3,300	4,000
	Low		1,450	2,460	2,460	3,000	3,500
Static pressure range		Pa	100 to 200	100 to 250	100 to 250	50 to 300	50 to 300
Standard static pressure		Pa	100	100	100	260	250
Sound pressure level	High	dB(A)	45	49	49	51	53
	Med		38	45	45	48	51
	Low		32	42	42	45	49
Dimensions (H x W x D)		mm	400 x 1,050 x 500			450 x 1,550 x 700	
Weight		kg	45		50	82	82
Connection pipe diameter	Liquid	mm	ø9.52 (Flare)			ø12.70 (Brazing)	
	Gas	mm	ø19.05 (Flare)			ø22.22(Brazing)	
	Drain		ø25 (I.D.) ; ø32 (O.D.)				

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

## Indoor units specifications

### Floor / Ceiling



Model name			ABYA12LATH	ABYA14LATH	ABYA18LATH	ABYA24LATH
Power source			230V-, 50Hz			
Capacity	Cooling	kW	3.6	4.0	5.6	7.1
	Heating		4.1	4.5	6.3	8.0
Input power		W	57	57	88	88
Airflow rate	High	m³/h	600	600	780	880
	Med		500	500	650	740
	Low		480	480	550	630
Sound pressure level	High	dB(A)	40	40	46	48
	Med		37	37	41.5	44
	Low		34	34	37	40
Dimensions (H x W x D)		mm	199 x 990 x 655			
Weight		kg	28			
Connection pipe diameter	Liquid (Flare)	mm	ø6.35		ø9.52	
	Gas (Flare)		ø12.70		ø15.88	
	Drain		ø25 (I.D.) ; ø32 (O.D.)			

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

### Ceiling



Model name			ABYA30LATH	ABYA36LATH	ABYA45LATH	ABYA54LATH
Power source			230V-, 50Hz			
Capacity	Cooling	kW	9.0	11.2	12.5	14.0
	Heating		10.0	12.5	14.0	16.0
Input power		W	124	144	160	180
Airflow rate	High	m³/h	1,450	1,660	1,850	2,200
	Med		1,280	1,500	1,660	2,000
	Low		980	1,270	1,430	1,800
Sound pressure level	High	dB(A)	42	45	48	52
	Med		39	42	46	50
	Low		35	37	41	46
Dimensions (H x W x D)		mm	240 x 1,660 x 700			
Weight		kg	48			
Connection pipe diameter	Liquid (Flare)	mm	ø9.52			
	Gas (Flare)		ø15.88		ø19.05	
	Drain		ø25 (I.D.) ; ø32 (O.D.)			

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

## Compact Wall Mounted



Model name			ASYA07LACH	ASYA09LACH	ASYA12LACH	ASYA14LACH	ASYE07LACH	ASYE09LACH	ASYE12LACH	ASYE14LACH	
Power source			230V-, 50Hz					230V-, 50Hz			
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	2.2	2.8	3.6	4.5	
	Heating		2.8	3.2	4.1	5.0	2.8	3.2	4.1	5.0	
Input power			W	16	16	19	30	15	16	20	
Airflow rate	High	m³/h	490	500	560	670	490	500	560	680	
	Med		450	450	480	490	450	450	480	490	
	Low		370	370	420	420	370	370	420	420	
Sound pressure level	High	dB(A)	35	36	39	44	34	35	38	43	
	Med		33	33	35	37	32	32	34	35	
	Low		27	27	31	32	26	26	30	30	
Dimensions (H x W x D)			mm	275 x 790 x 215				275 x 790 x 215			
Weight			kg	9				9			
Connection pipe diameter	Liquid (Flare)	mm		ø6.35				ø6.35			
	Gas (Flare)			ø12.70				ø12.70			
	Drain			ø13.8(I.D.) ; ø15.8-ø16.7(O.D.)				ø13.8(I.D.) ; ø15.8-ø16.7(O.D.)			
EV Kit (option)				-				UTR-EV09XB		UTR-EV14XB	

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

## Wall Mounted



Model name			ASYA18LATH	ASYA24LATH	ASYA30LATH		
Power source			230V-, 50Hz				
Capacity	Cooling	kW	5.6	7.1	8.0	8.8	
	Heating		6.3	8.0	73	980	
Input power			W	63	74	870	
Airflow rate	High	m³/h	870	940	720	750	
	Med		700	600	45	42	
	Low		540	43	39	37	
Sound pressure level	High	dB(A)	43	45	33	39	
	Med		37	39			
	Low		30				
Dimensions (H x W x D)			Net mm	320 x 1,120 x 220			
Weight			Net kg	16			
Connection pipe diameter	Liquid (Flare)	mm		ø9.52			
	Gas (Flare)			ø15.88			
	Drain			ø12 (I.D.) ; ø16 (O.D.)			

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

# Control Systems Lineup

Type			Split	Multi	VRF			
			J	S	V	V-II		
Individual control system	Wired Remote Controller		● UTB-YUD	● UTB-YUD	● UTB-YUB	● UTB-YUB	● UTB-YUB	● UTY-RNKY
	Simple Remote Controller		● UTB-YPB	● UTB-YPB	● UTB-YPB	● UTB-YPB	● UTB-YPB	● UTY-RSKY
	Simple Remote Controller (Without master control)		—	—	● UTB-YRA	● UTB-YRA	● UTB-YRA	● UTY-RHKY
	Wireless Remote Controller		● UTB-YNA	● UTB-YNA	Accessory	● UTB-YVB	● UTB-YVB	● UTY-LNHY
	IR Receiver Unit		● UTY-LRHY1	● UTY-LRHY1	Accessory	● UTY-YWA	● UTY-YWA	● UTY-YWB
	IR Receiver Kit		● UTY-LRHYA1 With wireless remote controller	● UTY-LRHYA1 With wireless remote controller	—	—	—	● UTY-LRHBY1
Centralized control system	Group Remote Controller		—	—	● UTB-YDB	● UTB-YDB	● UTB-YDB	● UTY-CGGY
	Central Remote Controller		—	—	—	● UTY-YCA	● UTY-YCA	—
	Touch panel Controller		—	—	—	—	—	● UTY-DTGY
	System Controller		—	—	—	● UTY-APGX	● UTY-APGX	● UTY-APGX
Adaptor & Convertor	Transmission Adaptor		—	—	—	● UTR-YTMA UTR-YTMB	● UTR-YTMA UTR-YTMB	—
	Network Convertor		—	—	● UTR-YGCA	● UTR-YRDA	● UTR-YRDA	● UTY-VGGX
	Network Convertor for LONWORKS®		—	—	—	● UTR-YLLA	● UTR-YLLA	● UTY-VLGX
	BACnet® Gateway		—	—	—	● UTR-YLBA UTY-ABGX	● UTR-YLBA UTY-ABGX	● UTY-ABGX
	Signal Amplifier		—	—	—	● UTY-VSGX UTR-YRPC	● UTY-VSGX UTR-YRPC	● UTY-VSGX
	External Switch Controller		—	—	● UTR-YESA	● UTR-YESA	● UTR-YESA	● UTY-TEKX
Service & Maintenance	Service Tool		—	—	—	● UTY-ASGX UTR-YSTC	● UTY-ASGX UTR-YSTC	● UTY-ASGX
	Web Monitoring Tool		—	—	—	● UTY-AMGX UTR-YMSA	● UTY-AMGX UTR-YMSA	● UTY-AMGX

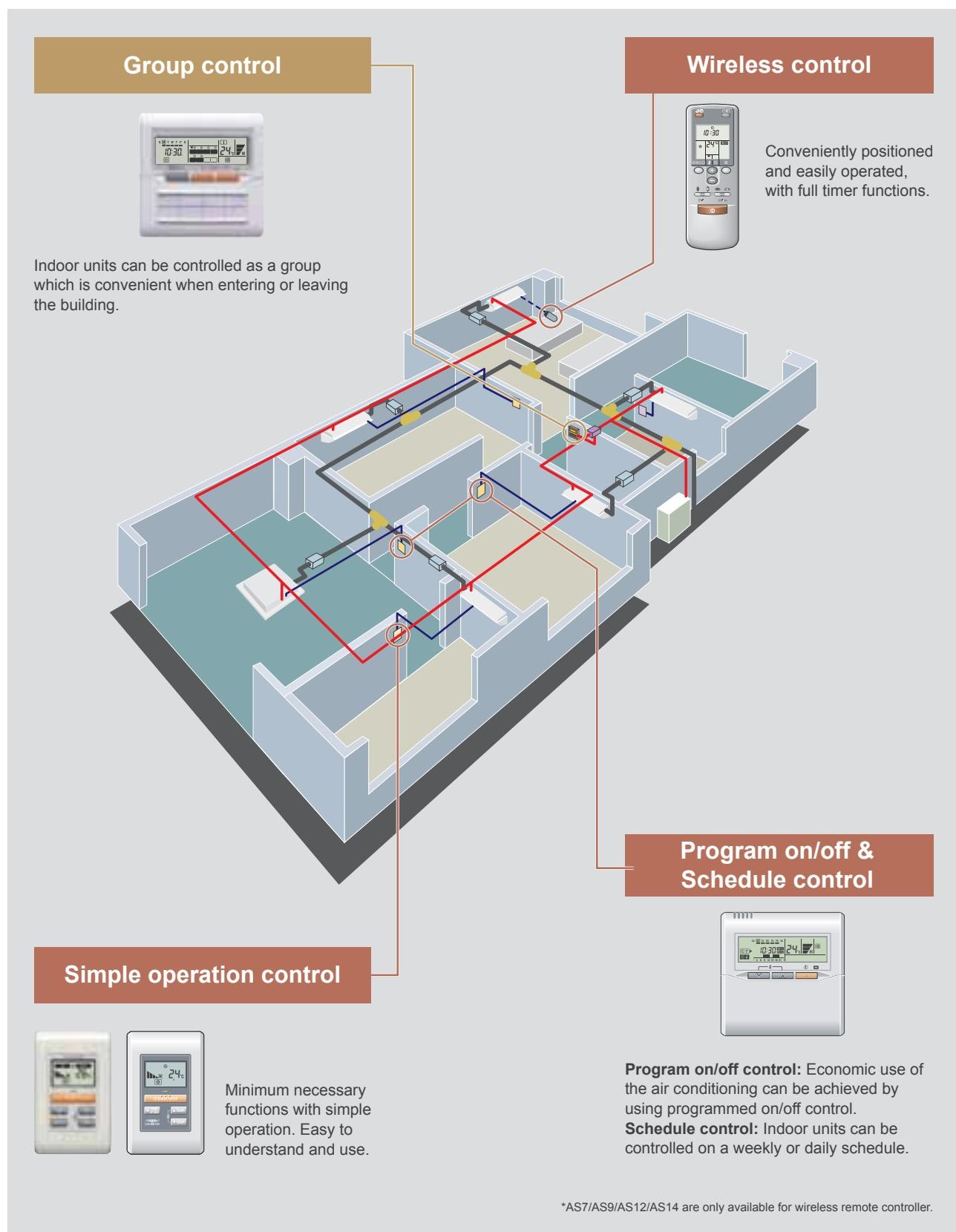
# Comparison table of Controllers

Type	Individual control					Centralized control			
	Wired Remote Controller	Simple Remote Controller	Simple <sup>*1</sup> Remote Controller	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller (Software)	
Model name									
	UTB-YUD UTB-YUB UTY-RNKY	UTB-YPB UTY-RSKY	UTB-YRA UTY-RHKY	UTB-YNA UTB-YVB UTY-LNHY	UTB-YDB UTY-CGGY	UTB-YCA	UTY-DTGY	UTY-APGX	
Max. controllable remote controller groups	1	1	1	1	8	400	400	1600	
Max. controllable indoor units	16	16	16	16	96	400	400	1600	
Max. controllable groups	-	-	-	-	-	64	400	1600	
Air conditioning control function	On / Off	●	●	●	●	●	●	●	●
	Operating mode setting	●	●	-	●	●	●	●	●
	Fan speed setting	●	●	●	●	●	●	●	●
	Room temp. setting	●	●	●	●	●	●	●	●
	Room temp. set point limitation	-	-	-	-	-	-	●	●
	Test operation	●	●	-	●	-	●	●	-
	Up/down air direction flap setting	●	-	-	●	-	●	●	●
	Right/left air direction flap setting	●	-	-	●	-	●	●	●
	Group setting	-	-	-	-	-	●	●	●
	RC prohibition	-	-	-	-	-	●	●	●
	Anti freeze setting	-	-	-	-	-	●	●	●
	Economy mode setting	●	-	-	●/- <sup>*3</sup>	-	●	●	●
Display	Failure	●	●	●	-	●	●	●	●
	Defrosting	●	●	●	-	-	●	●	●
	Current time	●	-	-	●	●	●	●	●
	Day of week	●	-	-	-	●	●	●	●
	R.C. prohibition	●	●	●	-	-	●	●	●
	Cooling/heating priority	●	●	●	-	●	●	●	●
	Address display	●	●	●	-	●	●	●	●
Timer	System schedule timer	-	-	-	-	-	-	●	●
	On/off per day	-	-	-	-	-	-	20	72
	On/off per week	-	-	-	-	-	-	140	504
	Weekly timer	●	-	-	-	●	●	-	-
	On/off per day	2	-	-	-	2	2	-	-
	On/off per week	14	-	-	-	14	14	-	-
Control	On/off timer	●	-	-	●	-	●	-	-
	Sleep timer	-	-	-	●	-	-	-	-
	Program timer	-	-	-	●	-	-	-	-
	Day off	●	-	-	-	-	●	●	●
	Min. unit of timer setting(Minutes)	30	-	-	5	10	10	10	10
	Status monitoring system	-	-	-	-	-	-	●	●
	Electricity charge calculation	-	-	-	-	-	-	-	●
Control	Error history	●	●	●	-	●	●	●	●
	Emergency stop	-	-	-	-	-	-	● <sup>*2</sup>	-
	Control via internet	-	-	-	-	-	-	-	●
	E-mail notification for malfunction	-	-	-	-	-	-	-	●

<sup>\*1</sup> "Master control" setting is not available for this model.<sup>\*2</sup> This function is available only through external input. control.<sup>\*3</sup> For UTB-YVB, this function is not available.

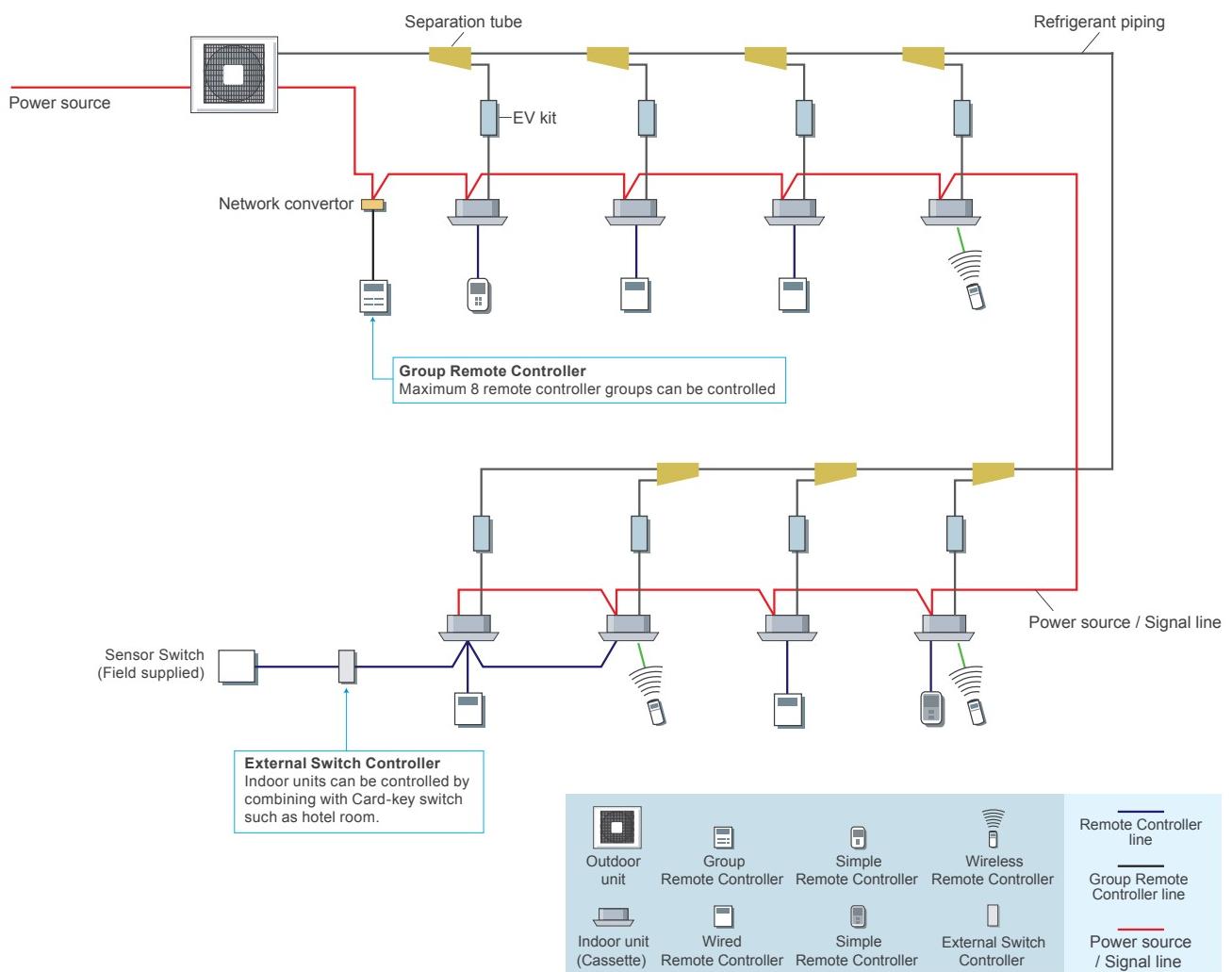
## System function

Five types of controllers are available to meet the varied needs of the building and the user. Tighter control over the air conditioned environment can be achieved by combining group remote controller which can operate all the indoor units at the same time, a wired remote controller with a weekly or daily schedule, a wireless remote controller and a simple remote controller.



## System diagram

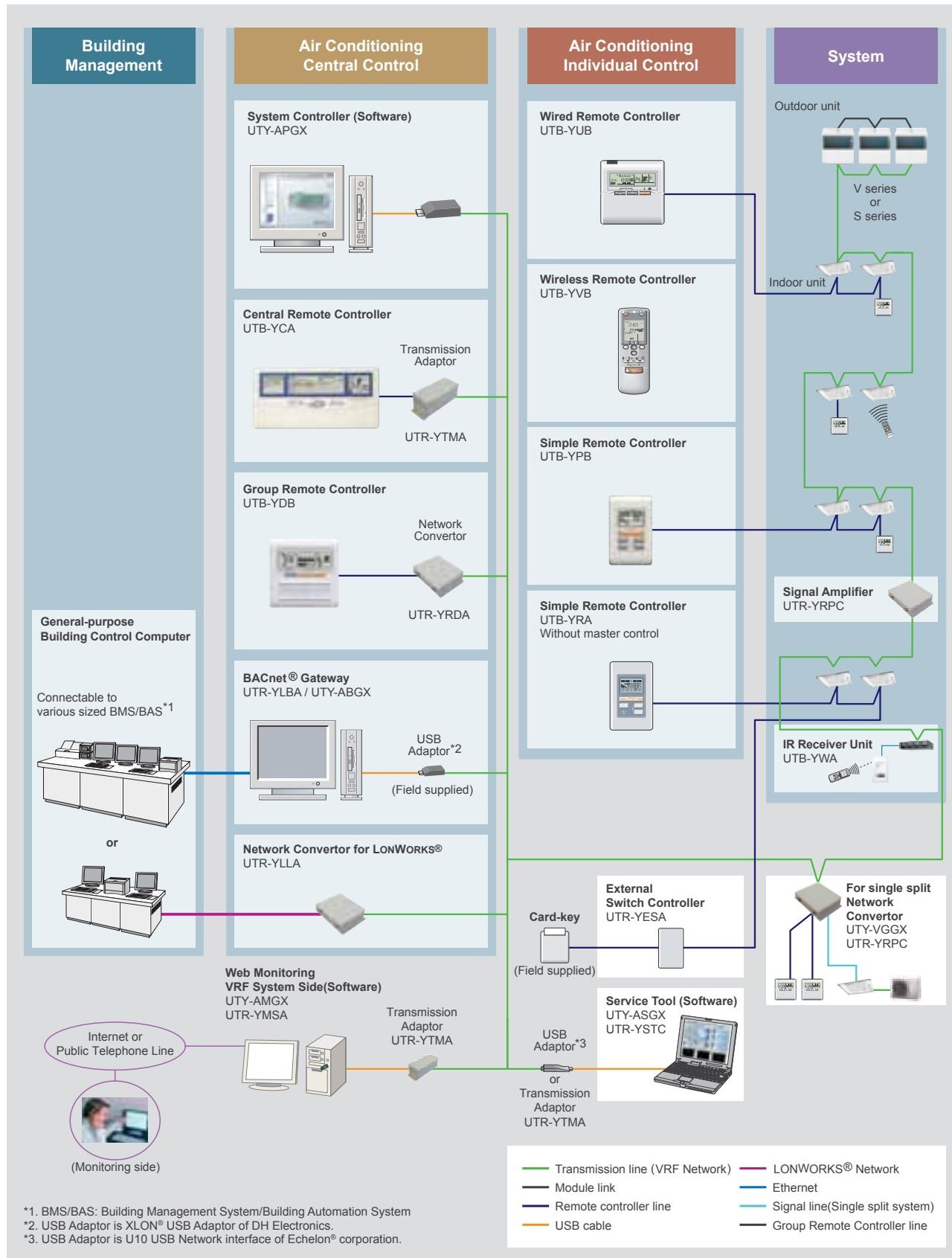
Max. connectable 8 indoor units	Max. piping length 70m	Max. total signal line 150m
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# Control Systems for S & V series

## System diagram

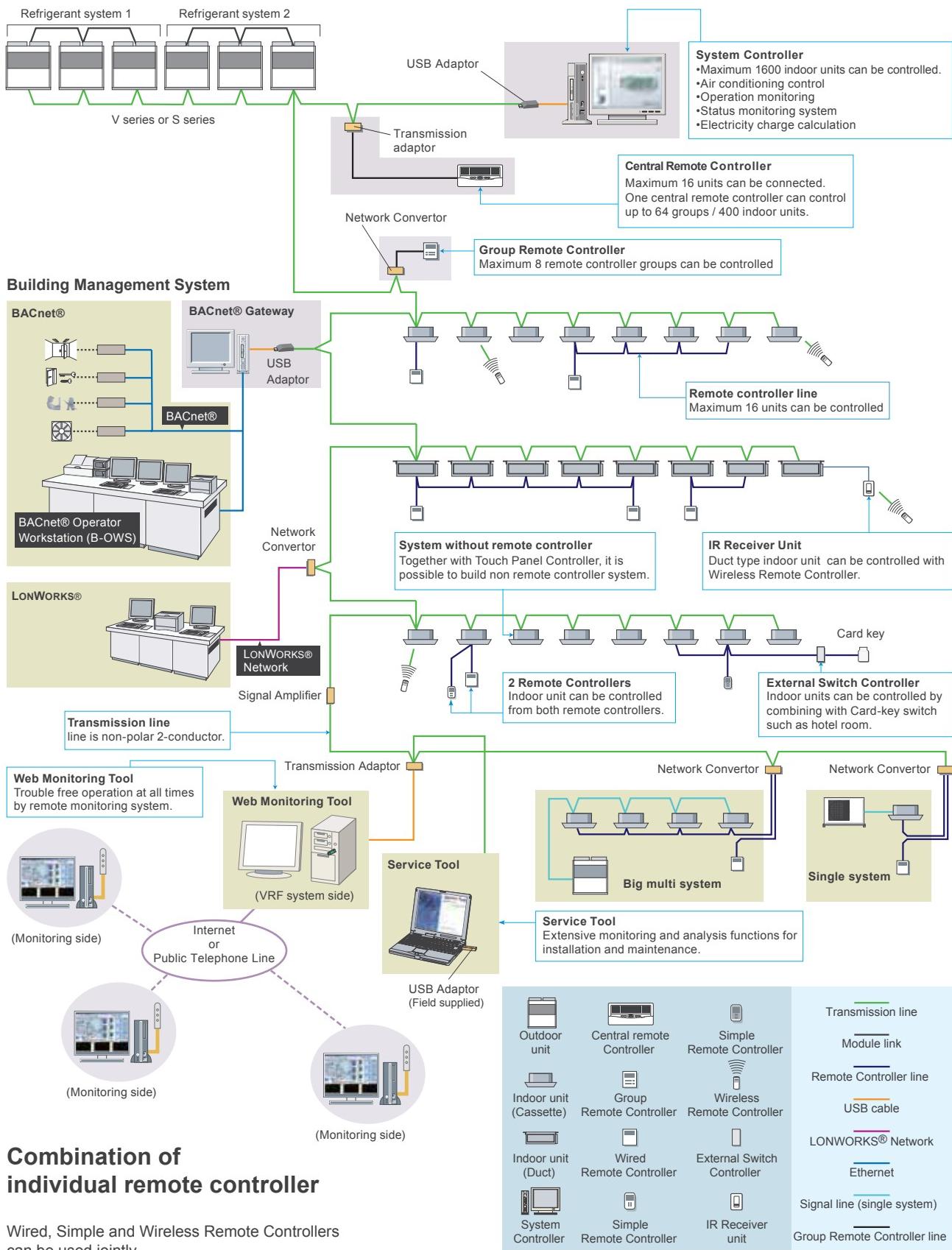
It supports every user's needs by offering a variety of control systems available, such as individual control, central control and building management system control options



Max. connectable outdoor units	Max. connectable indoor units	Max. transmission line length for S series	Max. transmission line length for V series
100	400	1,000m	2,000m

## Wiring system

- Wiring construction of the control system is made of power source wiring, transmission wiring and remote controller wiring.
- Total wiring length (total length of transmission line) can be extended up to 2000m (by using signal amplifiers).



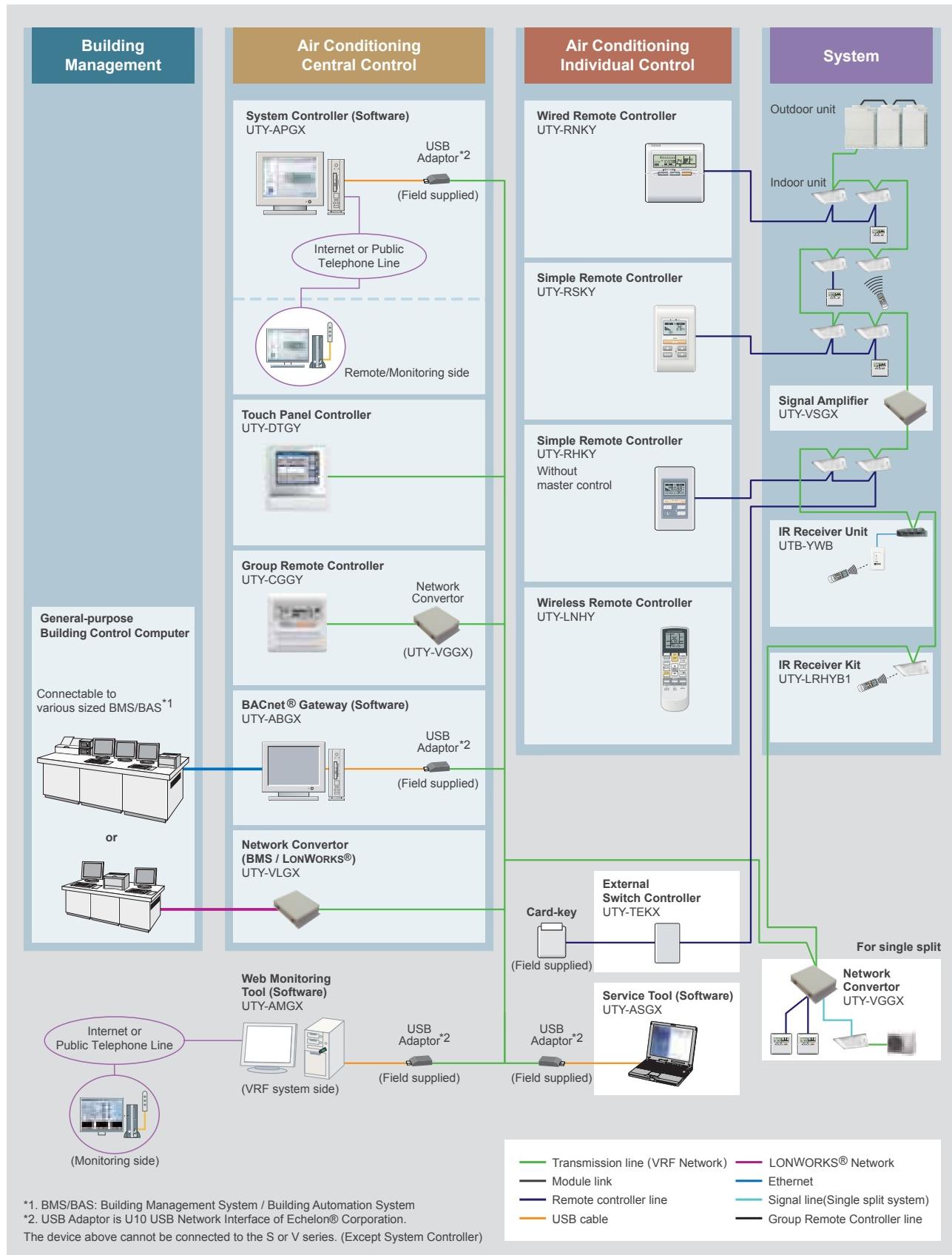
## Combination of individual remote controller

Wired, Simple and Wireless Remote Controllers can be used jointly.

# Control Systems for V-II series

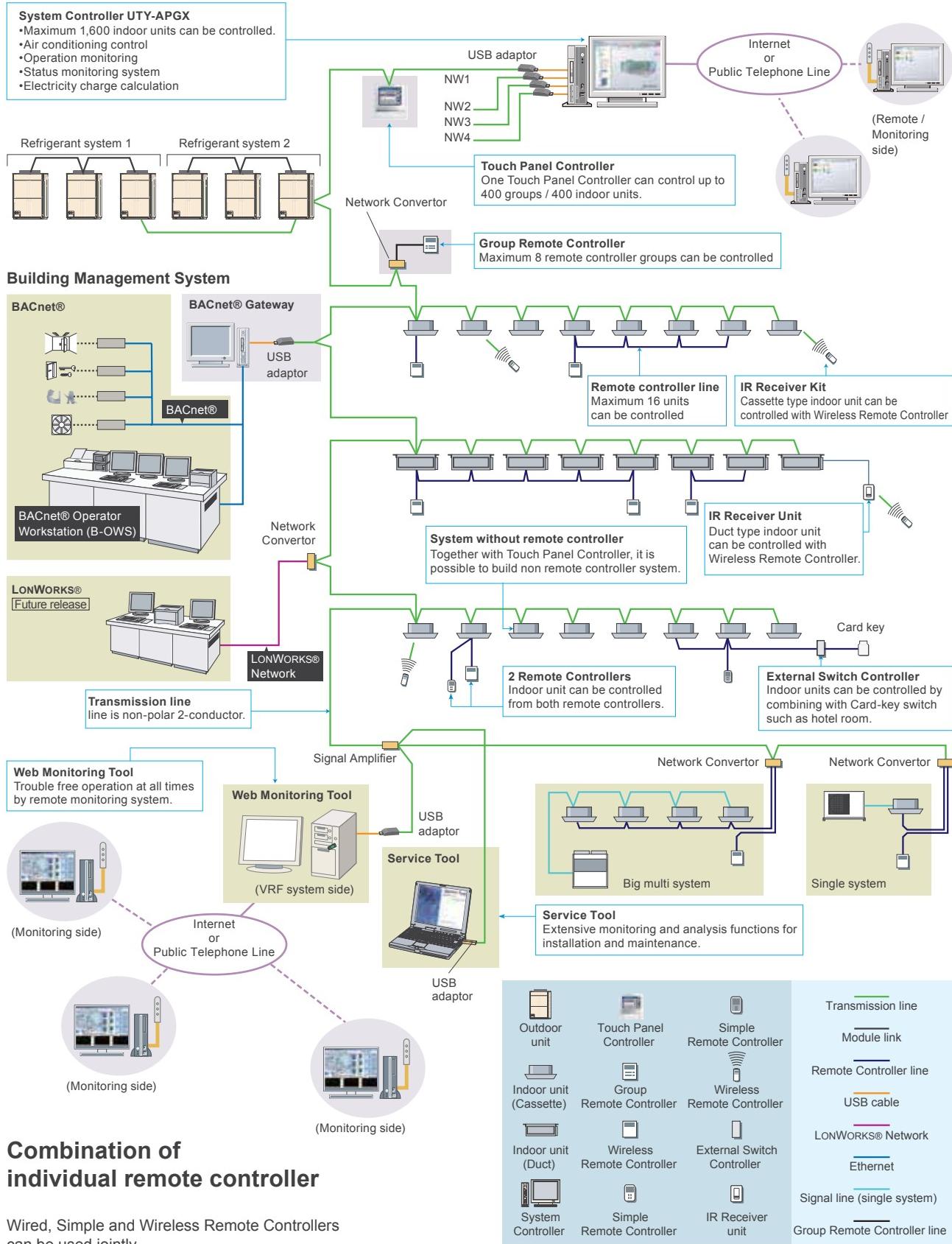
## System diagram

The V-II system supports every users needs by offering a variety of Control systems, including individual control, central control and building management control options.



## Wiring system

- Wiring construction of the control system is made of power source wiring, transmission wiring and remote controller wiring.
- Total wiring length (total length of transmission line) can be extended up to 3,600m (by using signal amplifiers).



### Combination of individual remote controller

Wired, Simple and Wireless Remote Controllers can be used jointly.

# Controller

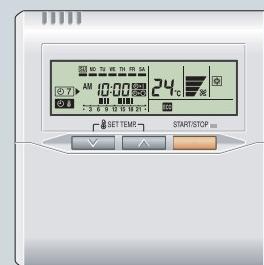
## Wired Remote Controller

### UTB-YUD/UTB-YUB/UTY-RNKY

The room temperature can be controlled by detecting the temperature accurately from the built-in sensor

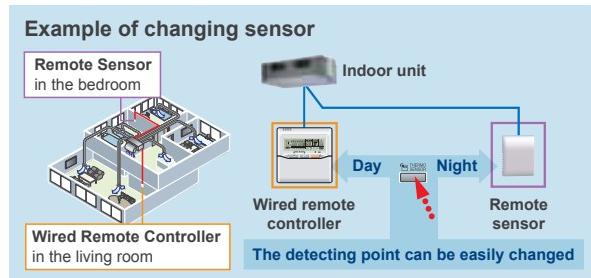
- Simple operation with Built-in Weekly / Daily Timer.
- Control up to 16 indoor units.
- Up to 2 wired remote controllers can be connected to a single indoor unit.

Max. controllable  
16  
indoor units



## Accurate and comfortable

Indoor temperature can be detected accurately by the inclusion of a thermo sensor in the body of the wired controller. This new wired remote controller and the optional remote sensor allows flexibility in sensor location, suitable for all requirements.



Displayed temperature is set temperature.

## Simple Remote Controller

### UTB-YPB/UTY-RSKY

### UTB-YRA/UTY-RHKY (Without master control)

Compact remote controller provides access to basic functions

- Up to 16 indoor units can be controlled with one remote controller.
- Suitable for hotels or offices as it is easily operated with no complex functions.

## Built-in timers

**Weekly timer:** Possible to set ON/OFF time to operate twice each day of the week.

**Setback timer:** Possible to set temperature for two times spans and for each day of the week.

At "Weekly timer" + "Set back timer" setup

## Diagnosis check function

Two methods are available for determining the cause of failure in the event of a malfunction occurs:

## Simple installation

Components are compatible with standard switch boxes. Flat back surface allows to be installed wherever it is needed.

Max. controllable  
16  
indoor units



UTB-YPB/UTY-RSKY    UTB-YRA/UTY-RHKY  
Without master control

## User-friendly operation

- A large On / Off button is provided in the centre of the remote controller for easy operation.
- Background light enables easy operation in a darkened room.
- Following an error display, diagnostics can be carried out on the controller.



## Functions

Model	UTB-YPB/UTY-RSKY	UTB-YRA/UTY-RHKY
On / Off	●	●
Fan control	●	●
Master control	●	— *1
Room temp. setting	●	●

\*1: "Master control" setting is not available. It is recommended to use together with other type controller.

## Specifications

Model name	UTB-YUD/UTB-YUB/UTY-RNKY	UTB-YPB/UTY-RSKY	UTB-YRA/UTY-RHKY
Power Source	DC 12V	DC 12V	DC 12V
Dimensions (H x W x D) (mm)	120 x 120 x 17	120 x 75 x 14	120 x 75 x 14
Weight (g)	160	90 (100 : UTY-RSKYT)	90 (100 : UTY-RHKYT)

DC12V is supplied by the indoor unit.

## Wireless Remote Controller

### UTB-YNA/UTB-YVB/UTY-LNHY

Simple and sophisticated operations  
with a choice of 4 daily timers

- A single controller controls up to 16 indoor units.

Max. controllable  
**16**  
indoor units

Selectable  
**4**  
daily timers



UTB-YVB

UTB-YNA/UTY-LNHY

### Built-in timers

Select from 4 different timer programs:

On / Off / Program / Sleep

**Program timer:** The program timer operates the ON and OFF timer once within a 24 hour period.

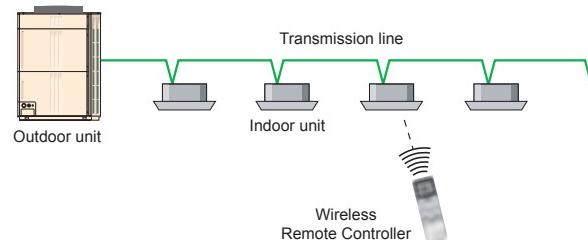
**Sleep timer:** The sleep timer function automatically corrects the set temperature according to the time setting to prevent excessive cooling or heating during sleep hours.

### Easy installation and operation

- Code selector switch prevents indoor unit mix-up. (Up to 4 codes can be set.)
- Wide and precise transmitting range.

### System addressing

During installation work, system addressing can be performed using the Wireless Remote Controller, thus eliminating manual switch setting.



## IR Receiver Unit

### UTY-LRHY1/UTB-YWA/UTB-YWB

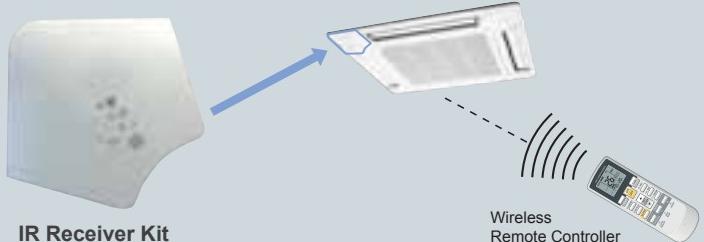
Necessary to control for all duct type by  
Wireless Remote Controller



## IR Receiver Kit

### UTY-LRHYA1 UTY-LRHYB1

Cassette type indoor unit can be controlled  
with Wireless Remote Controller



## Specifications

Model name	UTB-YNA/UTB-YVB/UTY-LNHY	UTY-LRHY1/UTB-YWA/UTB-YWB	UTY-LRHYA1/UTY-LRHYB1
Battery	1.5V (R03 / LR03 / AAA) x 2	DC 12V	DC 12V
Dimensions (H x W x D) (mm)	158 x 56 x 20	122 x 60 x 26.5	213.8 x 213.8x 25.7
Weight (g)	70	150	140

# Controller

## Group Remote Controller

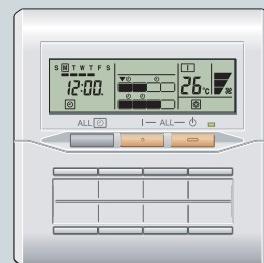
### UTB-YDB / UTY-CGGY

#### Group control of indoor units with simple operation

- Up to 8 remote controller groups can be controlled by one Group Remote Controller.
- Up to 64 Group Remote Controllers can be connected in one VRF network system.
- Network Convertor is required to connect Group Remote Controllers to a VRF network system.  
(Network Convertor allows up to 4 Group Remote Controllers)

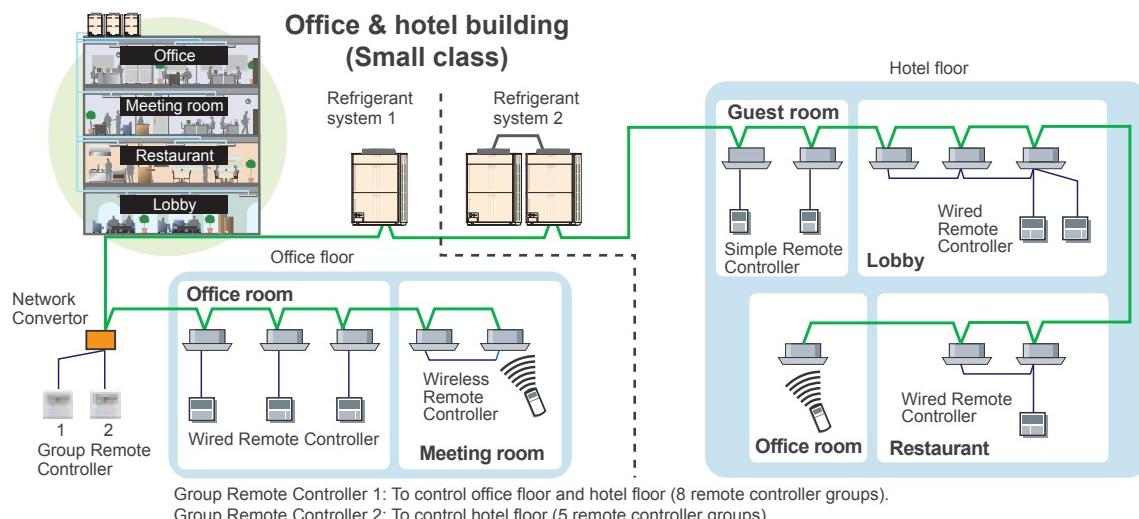
Max. controllable  
**64**  
group R.C. in a VRF  
network system

Max. controllable  
**8**  
remote  
controller groups



## Control up to 8 remote controller groups

- Single Group Remote Controller controls and monitors up to 8 remote controller groups.



## High performance and compact size

ON / OFF, Operating mode, Room temperature and Fan speed setting can be controlled / monitored centrally or individually.



## Built-in weekly timers

The weekly timer is provided as a standard function.

- The timer can be set up for up to 4 times per day. (On / Off, operating mode, set temperature)
- Allows separate settings for each day of the week.

## Specifications

Model name	UTB-YDB / UTY-CGGY
Power Source	DC 12V
Dimensions (H x W x D) (mm)	120 x 120 x 17
Weight (g)	200

DC12V is supplied by a network converter.

## Central Remote Controller

### UTB-YCA

- Functionality in a compact housing with built-in weekly timer**
- Up to 400 indoor units / 400 remote controller groups / 64 groups can be controlled by one system.
  - Up to 16 central remote controllers can be connected into one system allowing operation and monitoring to be achieved from the central control room, at each floor, by each tenant, or in the plant room.

Max. controllable  
**400**  
indoor units

Max. controllable  
**400**  
remote controller groups

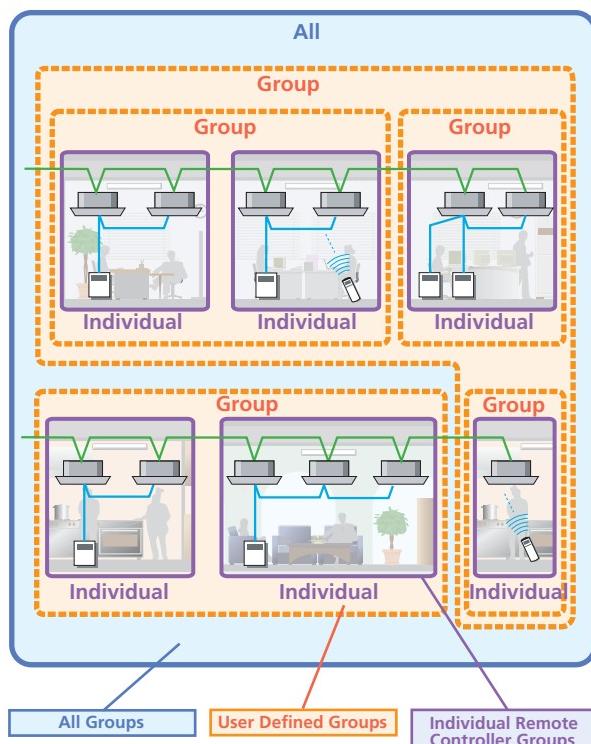
Max. controllable  
**64**  
groups



### Control up to 400 indoor units

- The central remote controller performs system control after you select All Groups, User Defined Groups, or Individual Remote Controller Groups.
- Accurate control of functions such as Start / Stop, Operating Mode, Temperature, and Air Velocity ensures occupancy comfort.

#### Controllable method

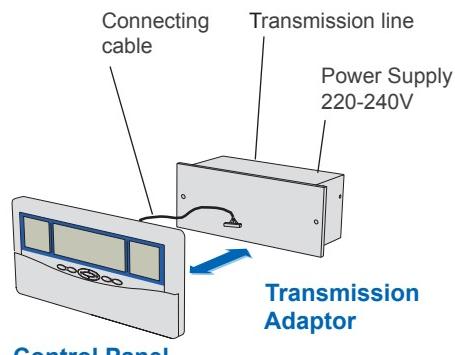


### Central control

Any of 6 functions of the individual remote controller can be locked from the Central Remote Controller: all functions, timer mode, operating mode, temperature setting, filter reset, on/off. All functions can be controlled via the Central Remote Controller only.

### Easy Installation

- The controller can be installed on any flat surface.
- The control panel and transmission adaptor can be installed separately.
- For flexibility in installation, the main unit can be built into the wall or exposed.



### Functions

- Built-in weekly timer
- Memory functions
- Error display

## Specifications

Model name	UTB-YCA	
	Control Panel	Transmission Adaptor
Power Source	DC 12V	220-240V 50-60Hz Single phase
Power Consumption (W)		4.8
Fuse Capacity (A)		3
Dimensions (H x W x D)(mm)	143 x 296 x 22	107 x 288 x 100
Weight (g)	550	1,300
<b>PACKING LIST</b>		
Packing List	Control Panel / Transmission Adaptor / Connecting Cable	

# Controller

## Touch Panel Controller

### UTY-DTGY

- Large-sized 7.5-inch TFT color
- LCD Easy finger touch operation
- Stylish shape and design to suit all application
- No additional component is required for installation
- Up to 400 indoor units can be controlled
- Selectable 2 display types (Icon / List) in monitoring mode

7.5 inch screen

Stylish design

Max. controllable  
400 indoor units



## Easy operation

- Wide range of simple-to-understand icons
- Operation can be selected using your finger or the dedicated touch pen by pressing the appropriate on-screen icon
- Up-to-date status display
- Background color identifies current control operation blue for monitoring, green for operational control

## Functions



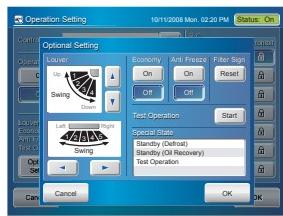
Individual control



Flexible grouping



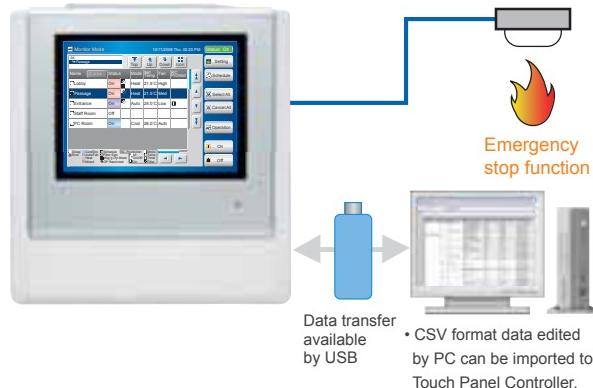
Schedule control



Indoor units operation monitoring

## Versatility

- Emergency stop function: Air conditioner can be turned off through the external input control
- The stored data can be transferred via USB port
- CSV format data edited by PC can be imported to Touch Panel Controller.



## Easy installation

- Touch Panel Controller is easily mounted to the wall.
- Flat back surface allows to be installed wherever it is needed.
- No additional component is required for installation.



## Specifications

Model name	UTY-DTGY
Power Source	100-240V 50/60Hz
Dimensions (H x W x D) (mm)	260 x 246 x 54
Weight (g)	2,150
Interface	USB 2.0

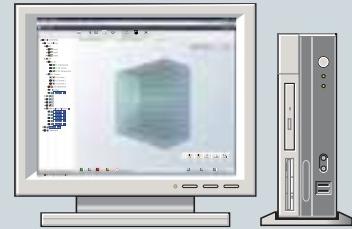
## System Controller

### UTY-APGX

This system realizes the advanced general monitoring and control of VRF system from small scale buildings to large scale buildings.

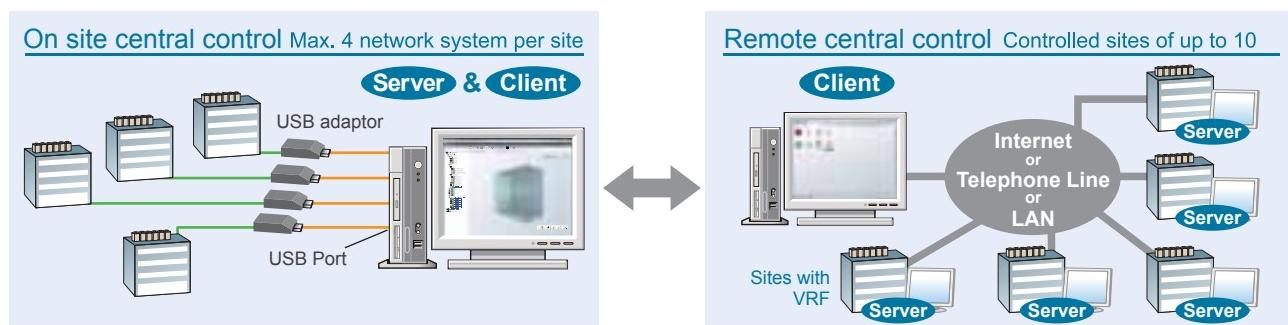
- Supports VRF S series, V series and V-II series.

Max. controllable  
**4**  
VRF system  
Max. controllable  
**400**  
outdoor units  
Max. controllable  
**1,600**  
indoor units

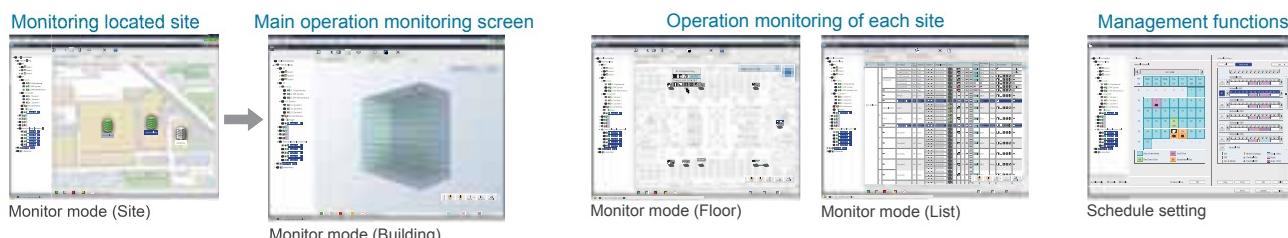


## Remote centralized control

System controller may be used on site or remotely over various networks for remote central control. System controller requires 2 softwares working together. Server program runs in the background and communicate with VRF System. Client program provides user interface and communicate with the Server. Server and client program may run in a single PC or in different PCs separated by network. By using client software, one PC can perform central control and web control of 10 VRF system sites with max. 20 buildings per site.



## User friendly view and operation



## Functions

- Electricity charge calculation
- Schedule control
- Error display
- Operating & control record
- Diverse control of indoor units
- Energy saving function

## Specifications

Personal Computer	AT compatible machine that runs Microsoft® Windows®
Operating System	Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition Microsoft® Windows® XP Professional with Service Pack2 or later
CPU	Intel® Pentium® / Celeron 2GHz (Server), 1GHz (Client) or higher
HDD	40GB or more of free space (5GB for Client PC)
Memory	1GB or more
Interface	USB port is required for each of the followings for Server PC; -Wibu Key (Software protection key) -Echelon® U10 USB Network Interface (Required for each VRF Network) Ethernet port is required for remote connection using internet.
Accelerator	Requires the internal graphics accelerator be compatible with Microsoft® DirectX® 9.0 or later.
<b>PACKING LIST</b>	
CD-ROM	Includes the software for System Controller. Both server and client software is included.

# Adaptor & Convertor

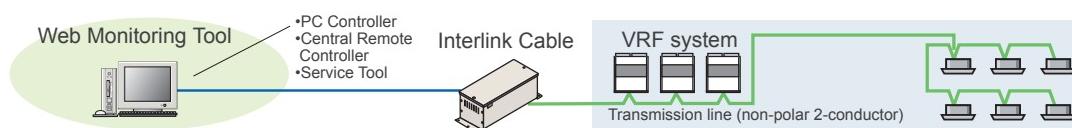
## Transmission Adaptor

### UTR-YTMA / UTR-YTMB

- For air conditioning of the medium and large size buildings, the control software can control and monitor air conditioners together with the ones in the other buildings.
- This device enables control by other equipment via an Interlink cable or connection cable.
- Up to 400 Indoor units / 100 Outdoor units can be connected to one Transmission Adaptor.

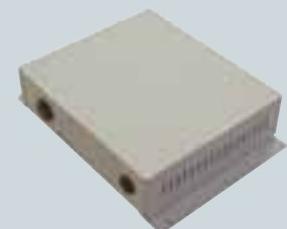


### Installation example



## Network Convertor

Max. controllable  
**16**  
Network  
Convertor units

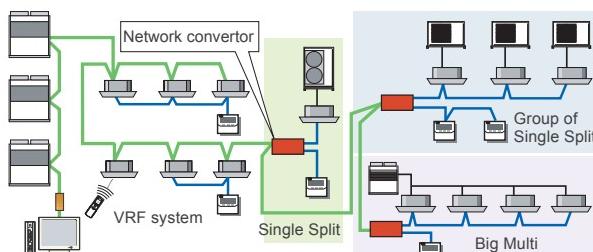


### UTR-YRDA / UTY-VGGX / UTR-YGCA

- This network convertor is to be used for connecting single split system or group remote controller with the VRF system.
- Please select the function by switching the dip switch during the installation.

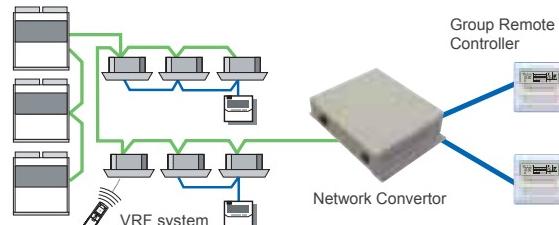
### Installation example

- Split type systems can be controlled from a central remote controller or PC controller through connection to the VRF's network convertor.
- Standard remote controller and central remote controller provide On / Off control, master control, temperature and fan control, etc.
- A single network convertor can be used to connect and control up to 16 single units.



Please consult your distributor for connectable split type air conditioner.  
Up to 100 network convertors may be connected in a single VRF system.  
A single network convertor is considered as a single refrigerant system, irrespective of the number of connected single models.

4 group remote controllers can be connected to a single Network convertor.



\* 2 refrigerant circuits can be covered by a single network convertor.  
Up to a total of 16 network convertors and central remote controller adapters can be connected in a single VRF system.

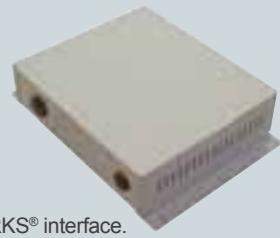
## Specifications

Model name	UTR-YTMA / UTR-YTMB
Power Source	50-60Hz 220-240V
Power Consumption (W)	2.9
Fuse Capacity	3A
Dimensions (H X W X D) (mm)	100 x 288 x 110
Weight (g)	1,300

Model name	UTR-YRDA / UTY-VGGX / UTR-YGCA
Power Source	50-60Hz 220-240V
Power Consumption (W)	8.5
Dimensions (H X W X D) (mm)	67 x 288 x 211
Weight (g)	1,500

## Network Convertor for LonWORKS®

Max. controllable  
128 indoor units

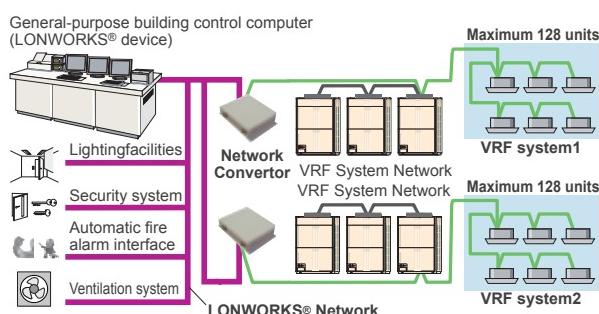


### UTR-YLLA / UTY-VLGX (Future Release)

•For connection between VRF system and a LONWORKS® open network for management of small to medium-sized BMS and VRF systems.

- The UTY-VLGX permits central monitoring and control of a VRF system from a BMS through a LONWORKS® interface.
- Up to 128 Indoor units can be connected to one Network Convertor for LONWORKS®

### Installation example



### Transmission specifications (BMS side)

Transmission speed	78kbps
Transceiver	FTT-10A
Transmission way form	Free topology
Terminated resistor	None (It attaches at the terminal of a network.)

## BACnet® Gateway

Software

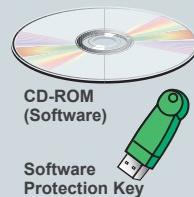
### UTR-YLBA / UTY-ABGX (Future Release)

- The VRF system can be incorporated into a Building Management System.
- Enables central control of up to 1,600 indoor units through BACnet®, a global standard for open networks.
- Conforms to ANSI / ASHRAE Standards® 135-2001 BACnet® Application Specific Controller (B-ASC) BACnet® / IP over Ethernet.
- Connects up to 4 VRF systems (1,600 indoor units / 400 outdoor units) per gateway.

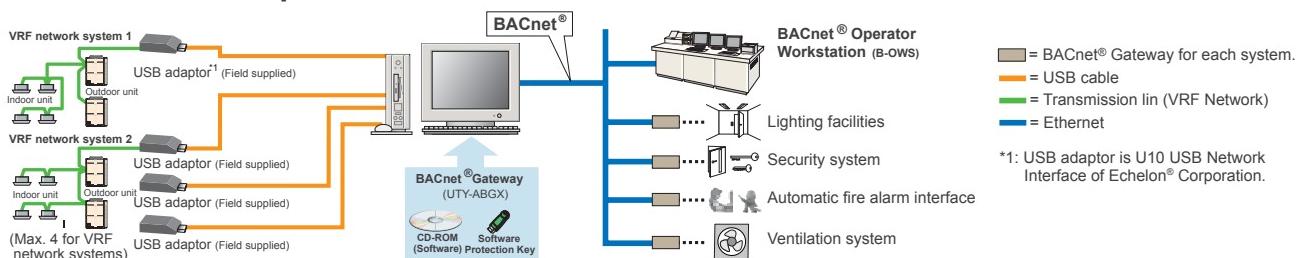
Max. controllable  
4 VRF system

Max. controllable  
400 outdoor units

Max. controllable  
1,600 indoor units



### Installation example



## Specifications

Model name	UTR-YLLA / UTY-VLGX
Power Source	220-240V 50/60Hz
Power Consumption (W)	4.5
Dimensions (H X W X D) (mm)	67 x 288 x 211
Weight (g)	1,500

Personal Computer	AT compatible machine that runs Microsoft® Windows®
Operating System	Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition Microsoft® Windows® XP Professional with Service Pack2 or later
CPU	Intel® Pentium® / Celeron 2GHz or higher
Memory	1GB (Vista) , 512MB (XP) or more
Interface	USB port is required for each of the followings; -Wibu Key (Software protection key) - Echelon® U10 USB Network Interface (Required for each VRF Network) Ethernet port is required
Other Software Required	Adobe® Acrobat® reader 4.0 or later

### PACKING LIST

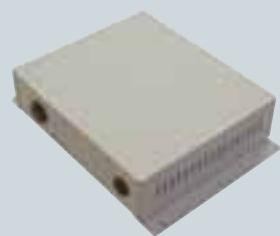
Packing List	CD-ROM / Wibu Key
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# Adaptor & Convertor, Service & Maintenance

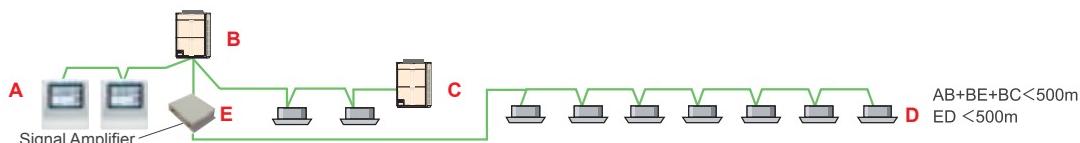
## Signal Amplifier

### UTR-YRPC / UTY-VSGX

- Transmission Line length can be extended up to 3,600m with multiple Signal Amplifiers.
- Up to 8 signal amplifiers can be installed in a VRF network system.
- A signal amplifier is required,  
(1) When the total wiring length of the transmission line exceeds 500m.  
(2) When the total number of units on the transmission line exceeds 64.



## Installation example



## External Switch Controller

### UTR-YESA / UTY-TEKX

Air conditioner switching can be controlled by connecting other sensor switches

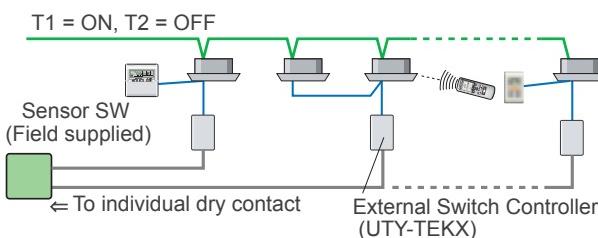
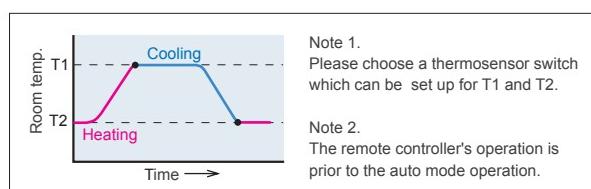
- In combination with a field supply Card-Key Switch or other sensor, the External Switch Controller allows control of the ON / OFF, Room temperature, Fan speed and Master control functions. This makes this product suitable for installations such as hotel rooms.
- Card-key or other sensor switches are available as a field supplied parts.



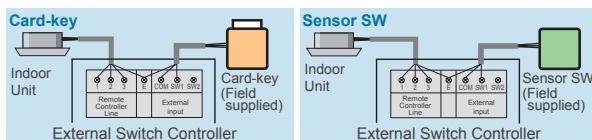
## Installation example

- Auto mode operation, which switches the cooling and the heating automatically, is enabled by using the sensor switch and External Switch Controller.

Note: All indoor units will operate in the same mode.



## Electrical wiring



## Specifications

Model name	UTR-YRPC / UTY-VSGX
Power Source	220-240V 50/60Hz
Power Consumption (W)	4.5
Dimensions (H X W X D) (mm)	67 x 288 x 211
Weight (g)	1,500

Model name	UTR-YESA / UTY-TEKX
Power Source	DC 12V
Dimensions (H X W X D) (mm)	120 x 75 x 30
Weight (g)	90

DC12V is supplied by the indoor unit.

## Service Tool Software

### UTR-YSTC / UTY-ASGX

Extensive monitoring and analysis functions for installation and maintenance

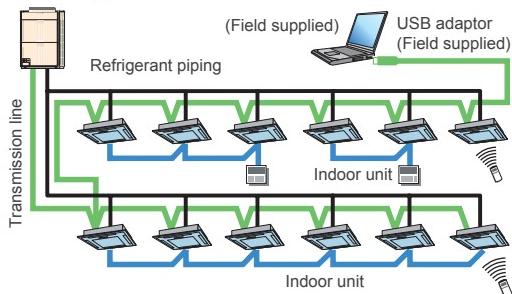
- Operation status can be checked and analyzed to detect even the smallest abnormalities
- Storage of data on system operation status on a PC allows access even from off site.
- Up to 400 indoor units (a single VRF system) can be controlled and monitored for large scale buildings or hotels
- This software can be connected to any point of transmission line with USB adaptor (field supplied).

Max. Monitor and control  
400 indoor units

Max. Monitor and control  
100 outdoor units



### Wiring connection



### Functions

- Equipment Detail (Diagram)



- Equipment Detail (List)
- Error History
- Remote File Download
- System List
- Commissioning Tool

## Web Monitoring Tool Software

### UTR-YMSA / UTY-AMGX

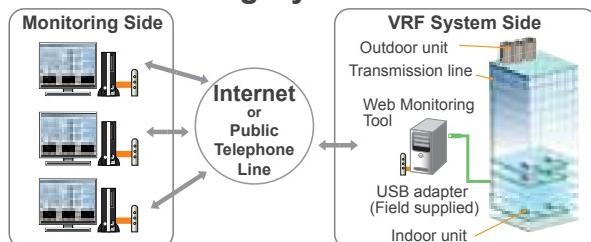
#### Product features

- Troubleshooting is performed by monitoring each air conditioning unit remotely during periodical system checks.
- Error notification can be automatically transmitted to several locations using the internet\*<sup>1</sup>.
- Requires either a dedicated internet connection\* or public telephone line.
- Determination of an error occurrence can be made through error warnings and equipment status information obtained from a remote location.
- The monitoring data in a remote side can be optionally downloaded. And, this data can be displayed in offline mode of the service tool.
- Monitoring side computer is not required to install special software, requires only general web browser.

VRF system  
can be supported  
**4**

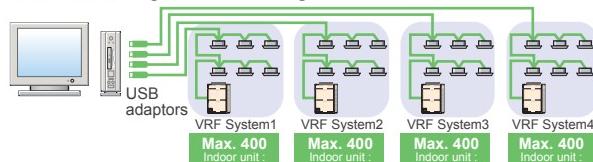
**1,600**  
indoor units  
can be supported

### Web Monitoring System



### Support 4 VRF system

- USB adaptor (max. 4 adaptors per PC) permit, monitoring of up to 1,600 indoor units.
- Suitable for large-scale buildings or hotels.



\*1:USB of internet mail system required.

### Specifications

Model name	UTR-YSTC / UTY-ASGX	UTR-YMSA / UTY-AMGX
Personal Computer	AT compatible machine that runs Microsoft® Windows®	
Operating System	Microsoft® Windows® 2000 Professional (English version / Service pack4 or later), XP Professional (English version / Service pack2 or later) Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition. (English version)	
CPU	Intel® Pentium® / Celeron®, AMD AthlonTM / DuronTM 1GHz or higher	
HDD	4.1 GB or more of free space	
Memory	1GB (Vista) , 512MB (XP/2000) or more	1GB or more
Interface	USB port is required for each of the following ; -Wibu Key(Software protection key) -Echelon® U10 USB Network Interface(Required for each VRF Network)	USB port is required for each of the following ; -Wibu Key(Software protection key) -Echelon® U10 USB Network Interface(Required for each VRF Network) Ethernet port is required for remote connection using internet.
Software	Internet Explorer 6.0 or later / Adobe® Acrobat® Reader 4.0 or later	
Hardware	USB Adaptor is U10 USB Network interface of Echelon® corporation.	

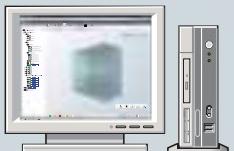
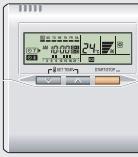
#### PACKING LIST

Packing List	CD-ROM / Wibu Key
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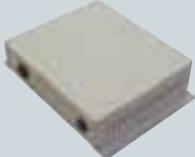
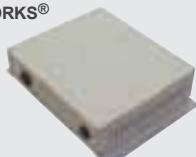
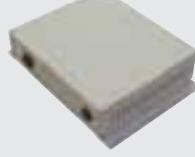
Personal computer must be field supplied. U10 USB Network Interface must be field supplied. Contact Echelon® Corporation or its local sales representative for detail.  
Product Name : U10 USB Network Interface - TP/FT-10 Channel Model Number: 75010R

# Optional Parts

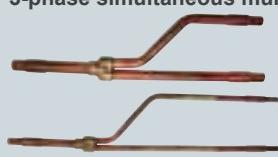
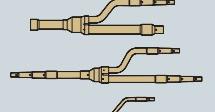
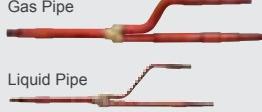
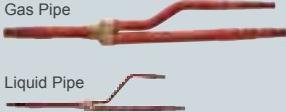
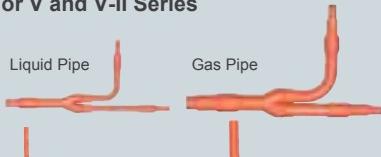
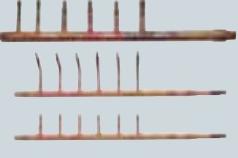
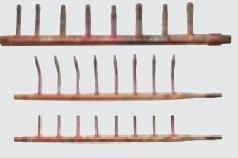
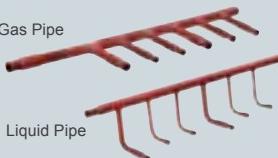
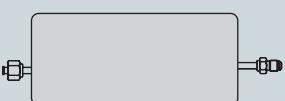
## Controllers

<b>System Controller</b>  UTY-APGX	<b>Touch Panel Controller</b>  UTY-DTGY	<b>Central Remote Controller</b>  UTB-YCA
<b>Group Remote Controller</b>  UTB-YDB/UTY-CGGY	<b>Wired Remote Controller</b>  UTB-YUD	<b>Wired Remote Controller</b>  UTB-YUB/UTY-RNKY
<b>Simple Remote Controller</b>  UTB-YPB/UTY-RSKY With master control	<b>Simple Remote Controller</b>  UTB-YRA/UTY-RHKY Without master control	<b>Wireless Remote Controller</b>  UTB-YVB
<b>Wireless Remote Controller</b>  UTB-YNA/UTY-LNHY		

## Adaptors/Convertors

<b>Transmission Adaptor</b>  UTR-YTMA/UTR-YTMB	<b>Network Convertor</b>  UTR-YRDA/UTR-YGCA/UTY-VGGX	<b>Network Convertor for LonWORKS®</b>  UTR-YLLA/UTY-VLGX
<b>BACnet® Gateway</b>  CD-ROM (Software) Software Protection Key UTR-YLBA/UTY-ABGX	<b>Signal Amplifier</b>  UTR-YRPC/UTY-VSGX	<b>External Switch Controller</b>  UTR-YESA/UTY-TEKX

## Connection Units

<p><b>Separation Tube</b> For 3-phase simultaneous multi</p>  <p>UTP-SX236A</p>	<p><b>Separation Tube</b> For 3-phase simultaneous multi</p>  <p>UTP-SX254A</p>	<p><b>Separation Tube</b> For 3-phase simultaneous multi</p>  <p>UTP-SX354A</p>
<p><b>Separation Tube</b> For J series</p> <p>Separation tubes are available for installation as necessary.</p>  <p>UTR-BP54U/UTR-BP054X</p>	<p><b>Separation Tube</b> For S series</p> <p>Separation tubes are available for installation as necessary.</p>  <p>UTR-BP54MA/UTR-BP90MA</p>	<p><b>Separation Tube</b> For V and V-II Series</p>  <p>Gas Pipe Liquid Pipe</p> <p>UTR-BP090X</p>
<p><b>Separation Tube</b> For V and V-II Series</p>  <p>Gas Pipe Liquid Pipe</p> <p>UTR-BP180X</p>	<p><b>Separation Tube</b> For V and V-II Series</p>  <p>Gas Pipe Liquid Pipe</p> <p>UTR-BP567X</p>	<p><b>Outdoor Unit Branch Kit</b> For V and V-II Series</p>  <p>Liquid Pipe Gas Pipe</p> <p>UTR-CP567X</p>
<p><b>RB (Refrigerant Branch) Unit</b> For S series</p> <p>Single type</p>  <p>UTF-Y54A1A</p>	<p><b>RB (Refrigerant Branch) Unit</b> For S series</p> <p>Multi type</p>  <p>UTF-Y90A4A</p>	<p><b>Header</b> For J series</p> <p>Headers are available for installation as necessary.</p>  <p>UTR-HD546U</p>
<p><b>Header</b> For S series</p> <p>Headers are available for installation as necessary. *Reducer is attached to each header kit.</p>  <p>UTR-HD906R</p>	<p><b>Header</b> For S series</p> <p>Headers are available for installation as necessary. *Reducer is attached to each header kit.</p>  <p>UTR-HD908R</p>	<p><b>Header</b> For V and V-II Series</p>  <p>Gas Pipe Liquid Pipe</p> <p>UTR-H0906L/UTR-H1806L</p>
<p><b>Header</b> For V and V-II Series</p>  <p>Gas Pipe Liquid Pipe</p> <p>UTR-HD908L/UTR-H1808L</p>	<p><b>EV Kit</b> For J series</p> <p>EV kit is available for installation as necessary.</p>  <p>UTR-EV2AXL/UTR-EV3XL</p>	

# Optional Parts

## Others

### For Duct type

Flange(Round)



UTD-RF204

Flange(Square)



UTD-SF045T

Long-Life Filter



UTD-LF25NA

Long-Life Filter



UTD-LF60KA

Drain Pump Unit



UTZ-PX1BBA/UTZ-PX1NBA

IR Receiver Unit



UTY-LRHY1/UTB-YWA/UTB-YWB

Remote Sensor Unit

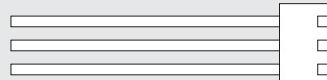
New amenity space can be offered by installing the Remote sensor in the remote controller.



UTD-RS100

External Control Set

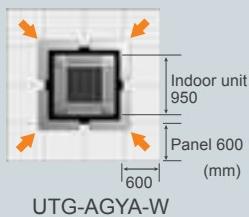
Use to connect with various peripheral devices and air conditioner PC board.



UTD-ECS5A

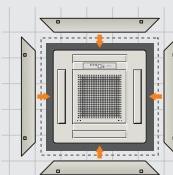
### For Cassette type

Wide Panel



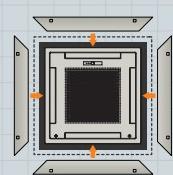
UTG-AGYA-W

Additional Grille



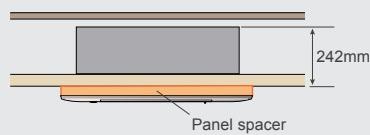
UTG-AGDA-W

Additional Grille



UTG-AGEA-W

Panel Spacer



UTG-BGYA-W

Air Outlet Shutter Plate

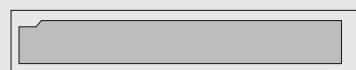
Shuts the air outlet when only using as 2 or 3 blow out.



UTR-YDZE

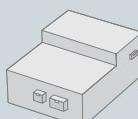
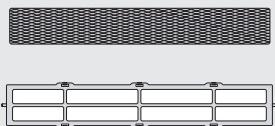
Air Outlet Shutter Plate

Shuts the air outlet when only using as 2 or 3 blow out.



UTR-YDZD

<b>IR Receiver Kit</b>	<b>IR Receiver Kit</b>	<b>Grille Kit</b>
 UTY-LRHYA1	 UTY-LRHYB1	 UTG-UDYD-W
<b>Grille Kit</b>	<b>Grille Kit</b>	
 UTG-UFYC-W	 UTG-UGYA-W	
<b>For Ceiling type</b>		

<b>Drain Pump Unit</b>	<b>Half Concealed Kit</b>	<b>External Indication Kit</b>
 UTR-DPB24T	This kit is used to half conceal floor type indoor unit into the wall.  UTR-STA	 UTY-XWZX
<b>For Wall Mounted type</b>		
<b>Air Clean Filter</b> Air clean filter assembly for initial setting.	<b>Air Clean Filter</b>	<b>EV Kit</b> For without EV Kit model (V and V-II series)
 UTR-FA08	 UTR-FB03	 UTR-EV09XA/UTR-EV14XA/ UTR-EV09XB/UTR-EV14XB
<b>Sub Interface Board</b>		
 UTY-XCBXE		